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ORIGINAL DEPARTMENT.

COMMUNICATIONS.

THE DESTRUCTIVE EFFECTS OF ALCOHOL.

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Of Belleville, Illinois.

Opinionum commenta delet dies nature judicia confirmat.—Cic.

Time obliterates the fictions of opinion and confirms the decisions of nature.

Said the Right Hon. W. E. Gladstone, Prime Minister of England: "The evils of intemperance in the United Kingdom are equal to the combined calamities of war, pestilence, and famine, and this is the measure of our discredit and disgrace."

It is a fact well known that alcohol is a product of fermentation of substances containing carbon, which is abundantly found in sugar and starch, and exists nowhere in the world as a natural product. It is the result, then, of a slow and destructive distillation of the natural chemical products of the vegetable world, and not until that fungus called yeast has produced death and decay is alcohol formed.

Thus it will be seen that alcohol is a chemical combination of carbon, hydrogen, and oxygen, discovered and made by art.

"Nature," says Count Chaptel, "never forms spirituous liquors. She rots the grape upon the branch, but it is art which converts the juice into wine; no chemist has ever yet found it among the substances formed by plants."

This statement is corroborated by the ablest physicians and chemists everywhere, and we shall try to show in the course of this article, to some extent at least, that alcohol, being an un-

natural product, cannot be a nourishment, nor is it a life-giving or a life-sustaining element or substance. We are well aware of the fact, however, that there are some unsolved problems connected with its *modus operandi* upon the human body, and prejudice in its favor by mankind that must be overcome; but enough is known in reference to its baneful influence upon the animal economy to arraign it before a court of justice and at the bar of public opinion. The evidence that has accumulated by the statistics of the vital statistician and chemist, history and tradition warrant us in stating at the very outset of the investigation that the verdict of condemnation against the use of this fell destroyer and public enemy of the human race is not too severe; but in the course of the investigation we shall try, in our humble way, to give it and its advocates a fair and impartial hearing, for it is a principle of equity and justice that nothing should be condemned as pernicious and hurtful until an investigation has been obtained. And we shall assert, without the fear of contradiction or refutation, that alcohol is no more the gift of a beneficent Creator than small-pox, yellow fever, diphtheria, measles, typhus, typhoid, leprosy, or any other contagious or infectious disease.

I am well aware of the fact that not many years ago Baron Leibig, the distinguished German chemist, made the startling declaration that no alcohol left the animal economy unchanged, and that it greatly assisted combustion in the production of animal heat in combining with oxygen and passing out of the system as carbonic acid and water. A theory from so distinguished a scientist and chemist satisfied many and silenced

others; but it was a theory only, and, like all theories of the kind, it was soon doomed by more careful investigation of science to the shades of oblivion, which we shall presently show.

One fact that we all know and are familiar with, is that alcohol passes off by the breath, in fact, by all the excretions or emunctories of the body. Says Dr. James Kirk, of Scotland: "I dissected a man who died in a state of intoxication, after a debauch. The operation was performed a few hours after death. In two of the cavities of the brain—the lateral ventricles—was found the usual quantity of limpid fluid. When we smelled it the odor of whiskey was distinctly perceptible, and when we applied the candle to a portion in a spoon, it actually burned, the lambent blue flame characteristic of alcohol playing on the spoon for some seconds." Dr. Ogdon, of Aberdeen, corroborates the statement of Dr. Kirk. He says: "I am happy to be able to add one case to the number. The body of a woman, aged forty years, by the name of Callic, whom it was believed had drowned herself in a state of intoxication, was found on the 23d of August, 1831, in the Aberdeen canal. In company with another medical man, I was requested to examine the body. We discovered nearly four ounces of fluid in the ventricles, having all the physical qualities of alcohol, as was proved by the united testimony of two other medical men who saw the body and examined the fluids."

Three similar cases have occurred in the experience and practice of the writer. Three persons who had died after a drunken debauch. In company with several competent physicians and chemists, we discovered in the ventricles of the brain of two of the deceased upwards of two ounces and a half of fluid that had the odor of alcohol, and burned with a blue flame. Analysis by a competent chemist and a distinguished professor, demonstrated the presence of alcohol; in the ventricles of the other case it contained less than two ounces of fluid mingled with alcohol, which was proven by the tests applied.

These facts have been proven by experiments that have been made again and again by distinguished chemists and physicians upon the human body, and also upon the inferior animals. Chemistry has a tongue that is sharp and decisive. Like figures, it does not lie—for dogs, with other inferior animals, have been given alcohol until intoxication was produced—and from the blood alcohol was separated by chemical analysis and chemical reagents; it has been proven to be alcohol beyond the possibility of a doubt.

These facts go to establish not only a theory, but a fact, that alcohol passes through the animal economy, unchanged, scorching, burning, disorganizing, paralyzing, and breaking down sooner or later, every tissue that it comes in contact with. Now I think that it can be clearly demonstrated by experiments and by post-mortem examinations, that alcohol produces death by its specific action upon the nervous centres, and not by coagulating the blood, as was asserted by Orphila and others; but in this age of light, lightning, steam, and gold, the exacting genius of this scientific and progressive age demands that everything pertaining to science must be demonstrated. "That which we know is little, but that which we know not is immense," exclaimed Laplace; a truism that we should keep in our mind's eye. It was also asserted and believed by Bonchardot and Sanders, that alcohol disappeared in combustion and respiration, that once formed carbonic acid and water, from its chemical affinity for water. These observers readily concluded that alcohol had been changed in its transit through the lungs, and that the carbonic acid gas produced death by asphyxia.

It has further been asserted by astute and learned chemists that a variety of chemical combinations have been formed from the presence of alcohol in the circulation, and that it was finally disposed of and thrown out of the system as carbonic acid and water—an assertion that is not borne out by the conclusions reached by the ablest chemists of both Europe and America.

It may be stated here, once for all, that recent scientific deductions based upon actual experiments with alcohol upon living animals, and by a post-mortem examination, the Leibigian theory of alcohol being a food was premature, and this unfortunate theory has been the author of as much drunkenness and debauchery, if not more, than any theory that was ever promulgated by any scientific physician and chemist, for it is now known that alcohol is not a food, it is not a medicine, nor is it a stimulant; neither does it prevent tissue change; neither does it produce any warmth of the body; but it is an anæsthetic—a narcotic poison which depresses and paralyzes the vital forces.

Dr. John Higginsbotham, of Nottingham, England, says that *it is neither food nor physic*.

Let us suppose Leibig's theory is true—that alcohol is oxydized in the body—what will be the result? "The alcohol having a greater affinity for oxygen than for other elements of food, the hydrogen in the alcohol will unite with the free

oxygen circulating in the blood, and life is burned out too fast." Let us admit further for the sake of argument, that his theory is true. It would be a very costly nourishment, indeed, to say nothing of the quantity. It would require 2,920 quarts of the best Bavarian beer, which is equal to 116 quarts of pure alcohol, valued at \$292, in order to obtain the nourishment that is in a five-pound loaf of bread, that will cost only thirty cents; and here it may be affirmed, without fear from the microscopic eye of chemical criticism, that no chemical of whatever name or nature, whether fluid or solid, animal or vegetable, taken into the system for the purpose of nourishment, can become a food unless it can be decomposed and oxydized in the lungs, blood, and tissues. The vito-chemical apparatus of the animal economy being unable to decompose alcohol, brandy, wine, and beer, the whole alcoholic family maintaining their chemical union and integrity during their passage through the system unchanged, must exclude them as nourishment, and for the same reason they should be excluded as medicine, which we shall prove by and by.

Dr. Gordon said: "It would be hard to find a more destructive poison than ardent spirits."

To recall that typical experiment of Dr. Percy, who injected two ounces of alcohol into the stomach of a dog, to use the doctor's own beautiful language, "Never did I see every spark of vitality more instantaneously extinguished." Death here must have been instantaneous—like that produced by prussic acid—by a shock to the whole nervous system.

The experiment of Lallemand, Perrin, and Duroy, forever exploded the food theory of Leibig, and on chemical grounds; for they demonstrated beyond a doubt that alcohol left the system as it entered it, a hydro-carbon unchanged, and "no one," says this triumvirate of genius and learning, "has yet found traces of any chemical resolution or combination;" and this statement is corroborated by Drs. Carpenter and Richardson, of England. Hence, says Dr. Hargraves, "Alcohol not being decomposed or oxydized in the system, it can neither generate heat, nor by assimilation become part of the tissues, and therefore can no more sustain vitality or produce force than the whip or spur can supply the place of oats, corn, and hay, and sustain the vitality or strength of a jaded nag." Referring again to the rapidity with which alcohol produces death, the writer has seen two persons die within a few minutes from an overdose of whiskey, one a well-to-do citizen, whom I shall never forget, who died wondering at the suddenness of his demise.

This makes us think of that terse, sharp, and truthful saying of Dr. Grindrod, who said: "A copious London beer drinker is all one vital spark—he wears his heart upon his sleeve, bare to a death wound from the claw of a cat or a rusty nail. Every medical man in London dreads a beer drinker for a patient in a surgical case." Dr. Gordon also says: "Among the coal-heavers who are brought to the London hospital, the mortality is frightful. Now, there is not a medical man in the kingdom of Great Britain, France, or the United States, of any respectability as a scholar in his profession, that would not corroborate the statement made by Drs. Grindrod and Gordon, of London.

If alcohol, wine, and beer could be acted upon by the system, as it acts upon sugar, starch, and fat, which is oxydized, partially burned off in the lungs, and partially in the system, leaving behind them their derivatives, carbonic acid and water; then it would be a nourishment, and the Leibigian theory would be true. But such is not the case, and the Leibigian theory, therefore, is false. Hence, I am not surprised at Dr. W. C. Carpenter, of London, who says alcohol cannot supply anything which is essential to the nutrition of the tissues. The reason for this is plain: it is not dissolved in the system, but it coagulates the blood, hardens the tissues, and coagulates albuminous substances, produces premature death in the blood-discs or corpuscles, robs them of their hematine, and is at war with every chemical tissue of nature, absorbing water from the tissues—for it is a great drinker itself—it is not a food, nor a solvent of food, nor can it in any way assist, directly or indirectly, in the building up of any tissue; nor can it prevent tissue change, the last ditch into which its friends and advocates have been driven, for it has been asserted by them that it prevents tissue change, which is not true. I am certain, after thirty years of experience in the practice of medicine and surgery, and close observation in reference to alcoholic stimulants in health and disease, that they are not necessary to sustain the vital forces, but on the contrary hurtful and positively injurious.

—The population of Japan, according to the census of 1883, amounts to 37,011,964; and at the end of the year 1883, the three largest towns contained the following number of inhabitants: Tokio, 299,191 families with 999,623 souls; Kioto, 203,477 families with 840,943 souls; and Osaka, 364,254 families with 1,585,696 souls.

UTERINE AND OVARIAN REFLEXES.

BY A. E. CALKINS, M. D.,
Of Bath, Clinton county, Mich.
(Concluded from page 314.)

The most common seat of all reflexes, originating both in the uterus and ovary, is through the solar plexus to the stomach, constituting a secondary indigestion or dyspepsia. A recent case of mine was as follows:

Mrs. B—, aged 37, small, weak, and anæmic, the mother of three children, the last born in March, 1884. Had a hard labor, and menorrhagia and leucorrhœa since, with frequent attacks of facial and intercostal neuralgia and nervous chills. Complains the most of pains at pit of stomach, accompanied with nausea and vomiting whenever food is taken. Bowels either costive or loose, seldom regular. Patient also troubled with palpitation of the heart and flushing of the face. Tongue clean and normal. Has formerly been treated with acids and alkalies, digestants of all kinds, hydrocyanic acid, nux vomica, etc., etc., with no favorable results. Physical examination revealed endometritis, which being treated, nervous communication lessened between stomach and cervix, and nutrition improved, resulted in a rapid and, so far, permanent recovery.

All reflex dyspepsias have a similar history, simulating closely in symptomatology, primary indigestion, so far as the stomach symptoms are concerned, but added to them, the neuralgias, hysterias, palpitations, and leucorrhœas of pelvic origin.

It is this same reflex dyspepsia that causes so much trouble in diagnosing and treating it. The cutting off of the gastric and intestinal juices causes fermentation of the food, which forms new foci of irritation in the solar plexus, and makes almost a primary disease from one that was originally entirely sympathetic. New symptoms are developed, dependent more upon the later points of irritation than upon the original cause. An intolerable vertex headache, accompanied with a sensation of swimming of the head and dizziness, are an almost pathognomonic evidence of cerebral anæmia, of brain starvation. The stomach not being competent to digest the food, the blood first shows the want of nutrition, becoming thin and pale; there is a venous hum in the neck, an aortic murmur, with palpitation and irregular heart action, showing muscular weakness as a secondary result of non-assimilation. The intellect becomes weakened from the same cause, and also from poisonous half-digested food.

The kidneys are influenced to some extent from the irritation sent up through the sympathetic to the renal plexus. Their blood-vessels are contracted, and the watery portion of the urine is lessened, while the specific gravity is increased. At the same time the uterine and vesical centres are in such close proximity in the lumbar region that more or less irritation is reflected to the walls of the bladder itself, producing what is known as the "irritable bladder."

The same is true of the rectum and sigmoid flexure, and this reflex stimulation may result in a corresponding diarrhœa.

Irritation may thus extend from the periphery of the nerves in the uterus and ovaries, along the sensory nerves, to vaso-motor centres in the organs affected, and there set up new foci of irritation producing the irritable stomach, heart, kidney, etc., or it may be reflected back to the immediate vicinity of the original irritation over the vaso-motor nerves and produce a form of transient hyperæmia, which in a healthy organism and from natural causes is perfectly innocent, but in a uterus or ovary morbidly sensitive, deformed or diseased, produces a condition far from innocuous.

With the organs of generation in a healthy state, the physiological rise and fall of blood pressure, representing the menstrual cycle; the transient congestion and engorgement characterizing the sexual act; the determination of blood to the part and hemorrhage in menstruation; the development of all the latent possibilities of the uterus, with subsidence of ovarian activity during gestation; and, finally, the gradual extinction of all the functions of propagation at the menopause; all of these acts are taking place for thirty years without in any way being injurious to the general well-being of the organism.

Capable as the uterus and ovaries are of filling their offices in a normal manner, yet it is the system most of all others liable to outside derangements, which acting in a circle tend to propagate and perpetuate mischief. An over-sensitive ovary, resulting from reflex irritation, as sexual excitement or excess, suddenly stands forth as a prominent cause of reflex disturbance in distant organs. There is pain over the ovary and extending down the leg, contracted muscles, with a marked degree of nausea, vomiting, flatulence, pain under the left breast and at the top of the head, and, above all, hysteria.

In primary flexions of the uterus, at first the only symptoms excepting sterility, are these distant reflex manifestations of nausea, palpitations, etc. The digestion is deranged, the amount of

food assimilated is insufficient to nourish the body, there is a gradually increasing want of nourishment, associated with feeble health; the uterine tissues are starved, lose their firmness and tone, and the deformity increases with increasing results.

The same cycle of cause and effect, perpetuating each other, is illustrated in all hyperæmias and inflammations of the uterus and its appendages.

It is the management of uterine reflexes that proves the physician, and to a large degree founds his success financially. The treatment of pelvic reflexes may be studied under the three principal conditions producing them, viz.:

1. Social exciting causes.
2. Acquired mal-nutrition.
3. Hereditary susceptibility.

Whenever the exciting causes are prominent, and depend upon any mechanical or physical condition of the generative organs themselves, and can thus be satisfactorily diagnosed by examination and history, the cardinal indication is to remove the cause as far as possible. If it depends upon any abnormal position, with the organs still movable, replace and retain them in position by mechanical means of support. The simple act of replacement of a freshly-prolapsed uterus or strangulated ovary will instantaneously relieve all the urgent reflex symptoms. So also will sticking together the lips of a recently lacerated cervix or perineum; while often scarification will more tardily relieve her sympathetic distress arising from subinvolution and endometritis. The continued injection of hot water has an important therapeutic action in producing softening and absorption of more chronic conditions of the uterus and peritoneum, while counter-irritation does the same work for a congested and tender ovary.

In many cases slight and seemingly trivial lesions must be followed to their origin before the key to the problem of cure is discovered. Thus, leucorrhœa is a very common companion of these reflexes, and a symptom which in itself may be caused by numerous and altogether opposite causes. We must go "back of the returns" in these cases, and remedy the first and "only cause" before we can hope for permanent relief.

Cases frequently occur in practice when sound judgment and keen discrimination must be used to determine whether to endeavor first to remove the cause, or whether to treat some of its reflex results, and in some cases the latter course is the only one left to the physician. These cases are mostly chronic ones, and in which long-continued irritation has produced new points or foci of dis-

turbance, more important to be remedied than the original ones. Thus, when an irritable stomach is produced, which is utterly incapable of retaining a morsel of food, and exhaustion is imminent, a change of front is necessary, for nutrition must be maintained at all hazards. Then the indication for treatment is to lessen communication between the two irritated ganglia, and this is met by deadening the sensibility, and lessening the conductivity of the sympathetic nerves. For this effect some combination of the narcotic stimulants are of great service, and especially the bromide of potassium. Whenever the stomach is so sensitive as to reject all medicines, it may be soothed by hypodermic injections of sulphate of morphia and a little ergotine to reduce the capillary congestion. Then the bromide may be administered by the mouth and retained, and the digestive powers of the stomach husbanded for a short time by injections per rectum of "beef peptonoids," etc. As soon as the intestinal tract has become able to furnish proper nourishment for the system, the uterus and ovaries should receive the whole attention of the medical attendant, and any displacement or disease appropriately treated. One method, right here, of common treatment I wish to write decidedly against, and that is the continued use of bromide of potash in cases of uterine reflexes. The only place it can occupy as a remedial agent is fully filled when the irritability of the stomach and other organs affected reflexly is overcome. Its long use proves so depressing to the nervous system as directly to aggravate its susceptibilities to reflex disturbances, for it is a well known law of physiology, that the more debilitated and ill-nourished an organ is, the more liable it is to irritations, and especially is this true of all viscera supplied by the sympathetic system. Tonics are the physicians' lever to move the world in these cases, after the organs have been restored to their normal functions as far as possible by removal of the local cause. Nux vomica with iron is the drug most powerful for good in my hands. It creates red blood, tones up and gives healthy tension to the nerve fibres, and every way acts as a special and general revivifier of no low order.

In regard to the management of cases of reflex manifestations in which no local lesion can be discovered, and in which no appreciable one is supposed to exist, little need be said. If it be a case with the tendency to reflexes inherited, the only treatment at present justifiable by our knowledge of pathology, is the judicious use of alteratives and tonics. A combination of iodide of

potassium and iron, with a liberal and digestible diet is of great value.

It is in the cases arising from acquired conditions of weakness, general and local, that our therapeutic armamentarium is of the most practical value. Here the indication is to meet and remedy a state of inactivity in the organs of digestion and assimilation. Poor food, poorly digested and imperfectly assimilated, has resulted in starvation to the tissues and nerve centres. To combat this state of affairs, commands careful attention to the diet, alimentary canal, and the perfect performance of the functions of that great blood-producer and renewer, the liver.

REFLECTIONS AND SKETCHES OF TOWN AND COUNTRY PRACTICE.—NO. 2.

BY GEORGE HILL, M. D.,

Of Hughesville, Pa.

"I have taken much pains to learn how ignorant the graduates of the last twenty years are in relation to the art of bleeding, and find that they do not know how to do it."—DR. HIRAM CORSON, July 15, 1884.

Only last week I was called in consultation with Dr. X., a young physician of large practice. In the case, venesection was decided the thing to do. The doctor tied a pocket-handkerchief loosely around the arm of the patient, and was about to use a stick *a la tourniquet*!—when I asked the privilege, in lieu thereof, of simply throwing a strip of muslin an inch and a half wide and a yard and a quarter long, twice around the arm, and archly remarking at the same time, that in *this case* it would only be necessary to *dam* the superficial veins. But when to my horror he was about to plunge the lancet directly at right angles to the vein, and regardless of the prominent tendon of the biceps and the pulsating brachial artery, a second halt in the proceedings was called.

The doctor told me afterwards that bleeding had been somewhat of a failure with him—as in a previous effort, he had actually cut the artery, *"but no harm had come of it!"* And further, in excuse for himself, he said that venesection had not been regularly taught during his medical course of study, but only briefly alluded to occasionally, D. H., of this place, who has been in practice three years, says he has never bled any one, and only in one instance in his life, witnessed the procedure. He is now very anxious to know *how* and *when* to bleed, which is certainly a most commendable ambition. He declares that he heard little or nothing during his entire medical course on the subject of blood-letting. Hence, he said to me

this morning in my office, *"I am afraid to bleed."* Such testimony is so astounding, as well as humiliating, that I forbear giving anything further of this sort; hoping, but somewhat against hope, that these are exceptional cases.

On the second of the present month I was called in consultation with Doctor E——. Case, labor. First pregnancy; age 33. A plethoric and healthy woman, normal weight 150 pounds. Found head extra-uterine, scalp doughy and much tumefied, labia swollen, vaginal walls tender, rough, and dry, pains regular and very severe. Recommended copious bleeding previous to delivery perforce. Was antagonized—and reluctantly, am sorry to add culpably, yielded. As the case was imminent, proceeded at once to administer an anæsthetic; when the Doctor, after some difficulty, succeeded in locking his forceps, but failed in his efforts to deliver, he asked me to take his place, which I did, finding the difficulty mainly suction or atmospheric pressure, which is one of the serious drawbacks in perfect anæsthesia. Hence, without deft manipulation, and the admission of air by means of the free hand, the traction necessary for delivery is absolutely unwarrantable. Permit me here to *emphasize*, as I am not aware that this feature is dwelt upon by those who teach. For if a time ever occurs when the accoucheur may be specially liable to break, unwittingly, the Fifth Commandment, it is in the trying moments when the *delicate atlas* becomes the pivot of all his power. In two or three minutes the head was delivered, but the trunk remained until after consciousness returned; and then, two teaspoonfuls of fluid extract of ergot were required to produce expulsive force sufficient for extrusion. The child was resuscitated, and the placenta was readily removed. In a fraction beyond two days I was again called to this case. Found pulse 120, occasional delirium, bowels tympanitic, much tenderness throughout the hypogastrium. Vaginal walls as far as visible highly inflamed, no laceration, reported chills yesterday and day before. The doctor in charge at once proposed *blood-letting*, which I could only then sanction so far as to say that a little bleeding would do no harm, but was compelled to utter the *unwelcome fact* that the time for bleeding and the removal of that surplussage, that was now probably working death, was past. This woman should have been bled hours before her delivery, and what would have been better still, a blood-letting two or three weeks before her expected time, and such diet and treatment as would have special view to the excretions, especially the kid-

neys and bowels. This second visit was on the 4th inst.; she died on the 9th. The student of natural science, whoever he may be, cannot fail to see the apparent *over-work and waste* in reproduction down through all of animal and vegetable life, and to this the astute physician will ever find the *highest type of animal life* no exception.

Some years ago the writer was called in consultation a distance of twelve miles; arrived at 6 p. m. Case puerperal convulsions; first pregnancy; age twenty; medium in stature; usual weight 110; always healthy. Commenced with the fits twelve hours before. Patient unconscious, and had been for several hours. Os but little dilated and very rigid; child alive. In consultation, found the attending physician a clever talker, but mounted on his hobby—*high—never bleed!* And when I proposed that we make this case an exception, he met me with arguments which there was no time to antagonize in this emergency. And very soon I was forced to break in upon him by saying, "*Bleed and deliver, and you may save your patient alive; without it, she must die: this is my ultimatum; if not carried out at once I am of no use, and shall retire.*" Not receiving his consent, the pow-wow ended.

As I was about to depart in disgust, the father, mother, and husband, approached me, and the father said: "*Doctor, if thee thinks bleeding necessary, and can do anything for us in our great distress, remain and do so.*" Humanity proved stronger than ethics. I bled freely, and soon her livid and swollen countenance became more placid and pale, and the convulsion greatly mitigated in violence. In the use of cold applications to the head and warm to the extremities, at the termination of about two hours the womb had yielded sufficiently to admit the blades of the forceps. Being comatose, she was delivered in the interval without an anesthetic, in order to have the feeble expulsive efforts that yet remained.

Five days after delivery, I again saw this patient. She had then, for the first, become conscious that she was the mother of a living child. She said: "*Doctor, I hear thee, but I cannot see thee. Shall I ever see?*" I assured her that not only sight but health would be hers. In due time she recovered.

Permit me to add the incontrovertible truth, that by this bold venesection a premature and dual death was averted. It is a well-known principle that in all the acute inflammations the fibrin of the blood is no longer so readily held in solution, or, more correctly, suspension, and thus in passing through the morbid tissues, produces

stasis and hypertrophy, or is dropped as inorganic deposit or coagula; and thus that which in health is life, in disease works ruin and death. Hence, it was the intention at the beginning of this article to explain why I am more apt to bleed than some of my neighbors in this class of cases. This design was not carried out in this article, but may possibly be in the future.

It cannot be disguised that the medical profession has been greatly dazzled by the immense advances in every branch of the science during the last thirty years. This may be a *reason*, but ought not to be, why that mighty lever of our *art*, venesection, should be cast aside, or even put on half duty.

HOSPITAL REPORTS.

NEW YORK HOSPITAL.

CLINIC OF PROF. WILLIAM H. DRAPER.

Reported by W. H. SEELYE, A. M., M. D.

Pulmonary Abscess.

Patient is a woman 38 years of age, a native of Ireland, single, and a servant. She was admitted on the 13th of January. There is no rheumatic or phthisical family history. She had an attack of rheumatism fifteen years ago. Does not use stimulants, and has never had syphilis. Twelve days before her admission she had a chill, followed by fever, vomiting, pain in the left chest, and a feeling of prostration. But she kept about at her work, and only complained of shortness of breath, and a little cough, which was attended with a slight yellowish expectoration which did not contain any blood. She finally became so weak that she had to take to her bed. Her bowels have been regular, and micturition normal. On admission, her pulse was 98, respiration 28, and temperature 101°. Upon examination, patient's condition was fair; she was well nourished, and presented no oedema. Her treatment since her admission has been three to six ounces of brandy by day, and two to three ounces at night, with digitalis, spirit of mindererus, and carbonate of ammonia, and iodine has been painted over a portion of the left side of the chest. Last night she was seized with a violent fit of coughing, and she raised two cupfuls of gangrenous matter, with a foul and offensive odor. The odor of her breath was also very foul. At that time her pulse was 120, respiration 51, and temperature 101°. One ounce of brandy was ordered every hour, with 5 grains of ammonia carbonate and 13 of tincture of digitalis and spirit of mindererus.

Gentlemen, I find upon examination to-day very little expansive movement of the left chest, but the elevation movement is rather more satisfactory. I get no vocal fremitus either under the clavicle or at the side of the chest. Upon percussion of the left chest, I get no subclavicular dullness, and none till I come to the upper margin of the proper region of præcordial dullness. And outside of the region of præcordial dullness, I find

fair resonance as low down as the sixth rib. Below this I get dullness. Upon auscultation, I get a very good respiratory movement and murmur over the region of resonance, but at the fourth or fifth intercostal space I get very marked pleuritic friction-sounds. While she is sitting up I find that there is the same defective movement of the left side, which is almost still, while that of the right side is somewhat exaggerated. Posteriorly upon percussion I get a fair degree of resonance from above, down to a point about one inch below the inferior angle of the scapula on the left side. The vocal fremitus is not very clear, either above or below the line of dullness. I find very shallow breathing, but still vesicular breathing in the upper part of the left lung, and it seems so shallow because the lung moves very imperfectly. But at the line of dullness I begin to get bronchial respiration and bronchial voice, and upon forcible respiration I get a breathing sound, approaching to what is called cavernous breathing rather than bronchial.

You have heard the history, and you have seen the physical examination. It is now more than two weeks since she was taken ill with fever, pain in the left chest, and a cough. But note, she was not confined to her bed for several days, but kept about at her work. Now I have told you before that this is the history which we usually get here of pleurisy. It is not uncommon for such patients to come into the hospital, and then upon examination we find the chest more or less filled with fluid. The patient has, in fact, had pleurisy for some time, but he goes on with his work until he is obliged to give up because of the distress caused by the accumulation of the fluid in the chest, which interferes with the respiration. She came in last Friday, and from the physical examination there was some doubt whether the signs of dullness and loss of respiratory murmur indicated an inflammation of the lung itself, or only a simple pleurisy. To determine this the doctor punctured her chest with a hypodermic needle, but he failed to get any fluid; and so we came to the conclusion that we had to deal with a subacute pulmonic consolidation. There were some dry friction rales in the axillary portion of the lung, but there was no cough and no rusty characteristic pneumonic expectoration. But in furtherance of the idea that it was a consolidation of lung tissue rather than an effusion of fluid, was the fact that there was no displacement of the heart. Last evening she was seized with a sudden fit of coughing, and she began to expectorate very freely an extremely fetid mucoid expectoration, which nearly filled two ordinary cups. Now this might indicate one of two things: it might indicate that there had been a circumscribed empyema, which on account of its viscosity would not flow through the hypodermic needle, or else it was not reached by the needle. This formed an abscess which connected with the air by the bronchial tubes, and it continued to grow until it finally forced its way through the lung tissue into one of the larger bronchial tubes, and was thus discharged in a fit of coughing. Or this might be one of those cases of central gangrene of the lung which sometimes occur, and which are only brought to your attention by the usual signs of a subacute pneumonia.

I am inclined to think that the first hypothesis is not the correct one; because if a perforation of the lung had occurred so as to make a communication between the bronchial tubes and the pleural cavity, there would have been a greater disturbance of the respiratory functions than there was here, and the perforation would have been indicated, probably, by the usual characteristic signs of perforation. For in the pneumothorax of perforation you get a very sudden and extreme agony of pain, with very great dyspnoea, as a rule, because there is a more or less complete collapse of the lung from the entrance of air into the pleural cavity. But there were no such signs here. You see she lies upon the sound side, and she therefore has enough of the left lung left to breathe comfortably while lying upon the right side. And the assuming of this posture is usually a sign that there is still a considerable amount of useful lung-tissue remaining in the diseased lung. For where one lung is obliged to do all the work, lying upon that side would impede its expansion, and thus increase the dyspnoea. So I think that we are led to the conclusion that we have to deal with a gangrene of the lung, together with a surrounding subacute pleuro-pneumonia. And the gangrene has probably spread by causing a softening of the tissues around it, until it finally perforated a large enough bronchial tube to allow the emptying into it of the contents of this gangrenous abscess. And this was what took place last evening, when she coughed up a very offensive expectoration. Her breath is even now offensive, and has a gangrenous odor. This disagreeable odor is one of the most characteristic features of this disease. The expectorations can be deodorized, but the foul breath is harder to manage.

Gangrene of the lung is not a very common affection, and the cause which gives rise to it is usually exposure; and, in fact, this is the only exciting cause that I know of. It is probable that what determines the gangrene is a localized apoplexy of the lung, or the formation of a thrombus in a branch of the bronchial arteries. The most frequent location for it is in the middle lobe of the right lung.

The prognosis of this disease is very unsettled. If the lesion is of small size it may heal up, and the patient may fully recover after a protracted illness. There is usually more or less pneumonia around the seat of the gangrenous disease, and the tendency is to the extension of this gangrenous cavity until it becomes so large that it finally gets beyond the capacity of repair. Under these circumstances it presents the features, and follows the usual course of phthisis. But you must not always suppose that because you get a gangrenous breath you have to deal with gangrene of the lungs. There is a peculiar odor to the breath in fetid bronchitis which is so like that in gangrene of the lung that you cannot distinguish any difference between them. But in such cases you have the signs of a more extensive bronchial affection than there are here. Here we have an acute history of a destructive process, resulting in the formation of an abscess which finally perforated through the lung into a bronchial tube, and an accompanying pleuro-pneumonia. Ultimate dissolution will probably be the end of this process.

MEDICAL SOCIETIES.

PROCEEDINGS OF THE LOUISVILLE MEDICAL SOCIETY.

[Reported for the MEDICAL AND SURGICAL REPORTER by ALLEN KELCH, M. D.]

The proceedings at the meeting of the Louisville Medical Society, July 31, were begun by the reading of a paper on

Umbilical Hemorrhage.

by Julia Ingram, M. D., who said:

"The subject of umbilical hemorrhage is one on which as yet the physician is much at sea. Its intractability and its generally fatal result render it a much dreaded as well as an interesting disease. In order to bring the subject before you, I shall report some cases which have come under my notice, and I hope from remarks elicited by my paper to gain instead of imparting information. The first case which I shall mention is recalled from memory. Labor slow; delivery instrumental. There was a slight abrasion made by the forceps on the inferior maxilla. During the ensuing night there was some hemorrhage from this abrasion and from the cord, which, according to the rule of the hospital, was not ligated. The hemorrhage ceased during the next day. The fourth and fifth days there was hemorrhage at the base of the cord, which was detached on the night of the fifth. The hemorrhage still continued from the umbilicus, and there was slight hemorrhage from the bowels. Compression, tannic acid, Monsel's solution, and needles, were successively used without material influence. The child died on the seventh day. No autopsy.

"While in charge of the Maternity Department of the New England Hospital, three cases occurred in unusually rapid succession.

"Case 1. A primipara, aged 25. Labor began 5 p. m., October 13, 1882; child expelled 7:45 p. m. A short, easy labor, no hemorrhage, child a male, weight 9 pounds, seemed strong and healthy. Nothing abnormal noticed until the morning of the third day, when a fluctuating tumor became perceptible on the posterior upper border of each parietal bone. October 17.—The tumors have increased in size. The larger one, that on the right, measures 11 cm. in the longer and 7 cm. in the shorter diameter. The mouth shows great congestion, especially at the back part of the hard palate, and the blood oozes from the surface in the act of sucking. Spots of extravasated blood are seen on the under part of the jaw and about the inner malleoli. October 18, the hemorrhage still continues. There is bleeding from the umbilicus, and blood in the evacuations.

R. Tinct. ferri. chlor., 0.06.
Acid. sulph. (dil.), 0.12.

M. S. To be given every four hours.

"Tannic acid applied to the umbilicus having failed to stop the bleeding, ferri subsulphate is applied under a compress. The child still continues to eat when fed, but is not allowed to nurse on account of the pain and flow of blood from the buccal cavity. The bleeding from the bowels and umbilicus still continues. Faint lines of congestion are seen at the margin of the nails. A de-

cided icteroid hue has appeared. October 19. Child died at 3 a. m. No post mortem.

"Case 2. Primipara, aged 17. Labor began October 13, 11 p. m.; child born October 14, 8:30 a. m. No hemorrhage. Child a male; weight eight pounds. October 15. Baby's left eye congested, and some pus. Treated with zinc sulph. O. 3/8. October 17. The eye is still congested. The baby does not nurse well, and has little desire for food. October 18. Stump of cord separated to-day. October 24. There is slight bleeding at the umbilicus. Acid tannic was applied and compression used. October 25. There is still some bleeding. The application of yesterday is repeated. Baby nurses well; p. m., the bleeding continues; ext. ergotæ fld., 1.20 given per rectum. October 26. Dose of ergot repeated at midnight. It was not retained, and in one-half hour was again repeated. Another injection was given at 6 a. m. to be repeated every six hours. Compresses were changed at intervals of two hours during the night. They were saturated with blood. Spts. turpentine was applied to the umbilicus on absorbent cotton; compression is constantly kept up. There is a marked icteroid hue, October 27. The baby does not nurse well. Injections per rectum of milk and brandy are ordered to be given alternately every fifteen minutes. The finger is held on the umbilicus constantly to exert compression. October 28. Baby died this a. m. During the night it vomited blood four times, and during the morning three times. Nothing but brandy was retained by the bowels. October 29. Post mortem.—Tissues and organs very anæmic. The heart of normal size, but the right ventricle very small. No septum between the auricles. Two stomachs were found, the first of normal size, the second smaller, but otherwise the exact counterpart of the larger. Both were filled with a dark liquid which appeared to be disorganized blood. The other organs were apparently normal.

"Case 3. Primipara, aged 25. Labor began October 22, 5 p. m. Child expelled October 23, 6 a. m. Labor normal. Hemorrhage not excessive. The child a male, unusually large and well developed; weight, ten pounds. The head greatly moulded. October 25. The child has a peculiar whining cry. The left side of the face is partially paralyzed. It nurses well. October 27. There is a slight umbilical hemorrhage and some redness at the base of the cord. The paralysis of the face is more marked. October 28. The stump of the cord detached. There is still some hemorrhage. October 29. Child has two convulsions during the night. The anterior fontanelle is slightly bulged. The hemorrhage from the umbilicus still continues. The child eats when fed. It is much blanched. October 30. Child died in convulsions this a. m. The hemorrhage continued up to death, in spite of compresses and styptics. No post mortem. So many cases occurring in so short a time, and in the same ward, gave rise to close and careful scrutiny of all surroundings and possible mechanical causes bearing upon them. Nothing could be discovered in the sanitary condition or nursing that could even indirectly influence such a result.

"One case of lacerated perineum operated on and placed in the same ward healed perfectly by

first intention, showing that there could scarcely be any very unfavorable sanitary condition.

"The mothers of these infants were primiparæ, and all made rapid recovery. They gave good family history. No trace of hemorrhagic diathesis could be found. Their condition during pregnancy was good. In two of the four cases icterus appeared after hemorrhage began. In one case there was rather obstinate constipation. In three cases the bleeding began before the complete detachment of the cord. In the one case of post mortem nothing abnormal was discovered about the liver. In no case was there any tendency to the formation of a clot. Some of the blood caught and exposed to the air showed no coagulum. These cases were all male infants.

"Hæmorrhage from the umbilicus may occur either before or after the natural separation of the funis. If before, it usually arises from accidental or violent separation of the cord, or improper ligation. If it occur at the time or after the separation of the cord, it is more serious and in the majority of cases a fatal malady. Cases have been reported where, when the cord had separated, the blood-vessels had failed to close, and alarming and even fatal hæmorrhage occurred. In others, the normal contractility of the vessels has been lost in consequence of some inflammatory condition. Again, abscesses may form here, which, on their discharge, are accompanied by blood. But far the greater proportion of these cases apparently depend upon some morbid condition of the blood itself, due to different causes. In some cases this impoverishment may be traced to syphilitic origin; in others to improper hygienic conditions during gestation. Yet it is not confined to puny infants. In these cases reported each was over average weight and size. In a number of cases which have been reported the mothers gave history of hemorrhagic diathesis, shown in menorrhagia, excessive loss of blood in parturition or on slight injury. Hereditary predisposition is quite marked in some cases. Mr. Ray reports a case which was the third male child of the same mother, who had died of hæmorrhage from the umbilicus, and speaks of one where four male children of the same mother had died from this cause. Dr. Minot also mentions one case of a woman who had lost four children, and of another who lost two in the same way. Dr. Bowditch reports two cases of the same mother. The first a female; cord fell off the third day. Hemorrhage began on the fourteenth. Styptics, compresses, etc., were tried ineffectually, when hare-lip needles were used with temporary success. On the eighteenth day bleeding returned; on the nineteenth hæmorrhage from the bowels, and on the twentieth death occurred. The mother, after being delivered of two children having no tendency to hæmorrhage, gave birth to a male infant. The cord fell off on the fifth day, and on the tenth hæmorrhage began. The child died on the fourteenth day, in spite of all means, the cautery included. Jaundice occurred during life, and the liver was found much diseased in this case. The character of the labor apparently has no bearing upon this condition. Short and easy labors are as prone to usher in a hæmorrhagic infant as a long and difficult one. Jaundice is one cause given for this hæmorrhagic condi-

tion. It is claimed that, whether due to malformation of the liver or icterus neonatorum, it results in an impoverishment of the blood, and diminishes coagulability. Dr. Minot mentions that in three or four out of seven cases the liver presented deviations from the ordinarily healthy appearance. Organic disease of the liver has not been found in the majority of cases, and these deviations spoken of by Dr. Minot may be secondary. In the cases where icterus has occurred, it is not found oftenest to precede, but to follow hæmorrhage. May the discoloration of the skin be, at least in many cases, hæmatogenous, and this diminished coagulability be due to other causes than a morbid condition of the liver? I know of no treatment that is relied upon for any good permanent result. Compresses of various materials, styptics, needles, and the actual cautery, have been used with temporary relief, but with exceptionally permanent success.

"Theoretically, constitutional treatment of the mother during the period of gestation would afford best results; but this would apply only to cases of hæmorrhagic history, and I know of no reports of supposed success in such cases."

DISCUSSION.

Dr. Frank Wilson had met with but one case of umbilical hæmorrhage, and this, as usually happens, was fatal. He had frequently seen oozing of blood from the umbilicus after the cord had had dropped off, but this had usually ceased by the application of the simpler means for controlling hæmorrhage. In the fatal case use was made of most of the means suggested in the paper just read. In fact, they comprise about all we can make use of in a medical sense. Beyond those mentioned, surgical procedures it appears to me might be resorted to by cutting down upon the cord and re-ligating.

Dr. Edward von Donhoff said: "I intended to say nothing upon this subject until Dr. Wilson's suggestion concerning the surgical aspects of these cases reminds me of an experience which I published within the time of Dr. Gailliard's residence in this city. I saw a case in consultation in the person of a boy three days old. The cord was apparently diseased, and from the base of it considerable blood had been oozing since its birth. The means as suggested in the paper having been used, I suggested the propriety of putting a ligature on the cord submurally. For the purpose of doing this I passed a short needle down around the cord, and endeavored to bring it out at the same opening as far as possible. In this I succeeded to that extent that the boy is still living, and is now some ten or twelve years old.

"This subject was discussed at the medico-chirurgical society, and the conclusions arrived at were that this cause of infantile fatality is largely associated with mechanical derangements of the cord, and often enough, though it is not possible to discover clearly syphilitic history, yet it is possible frequently enough to justify the inference that this constitutional infection is largely causative.

"I do not think that structural defectiveness is determinable without dissection of the cord. In the case to which I have referred, the bleeding was general throughout the entire length of the

cord, and when a piece of it was removed after applying this second ligature its structure presented a soft, loose, spongy appearance. To say that these cases are associated with the hemorrhagic diathesis, however, letting the matter rest there, is saying little or nothing. To constitute the hemorrhagic diathesis there must be a mal-organization of structure, and at the same time defective blood-properties. There is defect of fibrin or of the albuminoids in the blood, as was apparent in one of the cases reported. The hemorrhage is but a factor even in the hemorrhagic diathesis, and the trouble against which it would appear impossible to do anything is the structural defectiveness. In the case which I reported, if that factor had been present the ligature would probably have amounted to nothing. I have no doubt that most instances are associated with immaturity at birth, although the cord may appear to be perfectly healthy, and yet be unfitted for the collapsing process which in the normal condition of things takes place readily.

"Syphilis is so fruitful of everything that can militate against the life of the child, that it is certainly important to notice the history and the evidences of its inheritance. In the case I have referred to, the child was the offspring of a mulatto woman and a white father, and presented an appearance such as might be expected of a child of such parentage, yet it was by no means cadaveric. Since that time the child has exhibited signs of inherited syphilis."

Dr. J. H. O'Reilly said: "The reader of the paper has so thoroughly canvassed the subject with reference to the causation and mechanical measures to be adopted for the relief of this condition, that but little remains to be said, and that only in a general way upon the subject. Most of these cases reported struck me as being clearly of that diathesis known as the hemorrhagic."

"I have not infrequently seen umbilical hemorrhage occur from loosening or slipping of ligature, and I have occasionally brought it about purposely to relieve congestion. I have never had, however, a case of hemorrhagic diathesis in this connection to deal with. In these cases reported the father's condition has not been ascertained. There may have been syphilis at the bottom of the blood dyscrasia."

"It occurs to me that there can be no better field for the application of the principles of prophylaxis than is presented in these very cases."

Dr. Leber thought it a matter of importance to consider the source of hemorrhage in these cases. Shortly after birth it is most likely to have as its source the hypogastric arteries, and later, the umbilical vein, and again it may occur from the capillaries extending with cord into the abdomen. In these cases bleeding is never violent, but constant oozing takes place. Of this variety I have never seen but two cases, both of which proved fatal. If the hemorrhage is due to traumatism then you may succeed in arresting it by religating. I believe that in every case some diathesis underlies this process. Icterus sometimes precedes, sometimes follows the hemorrhage. It is evidently due to some faulty condition of the blood or to some diseased condition of the walls.

Dr. Preston Scott said: "There is much that is accidental; something of good and bad luck in

medicine. For instance, one speaker has referred to his rare observation of placenta previa. In an experience of over twenty-five years it has been my good fortune not to have had one case. Nearly so in regard to the subject before the meeting. Only one time has the accident, umbilical hemorrhage, occurred to me. That is now so long since I can only recall that the subject was icteroid, and the event fatal despite styptics and the ligature. There must be some dyscrasia or some congenital deficiency to favor this accident. Were struma, or syphilis, or jaundice, the predisposing conditions, I have had ample opportunity to observe the event. That the question of tying or not tying the cord, or the manner of tying, has but little bearing on this event, is seen in the fact that it occurs as infrequently in the skilled and unskilled.

"The experience of the leader of this discussion is assuredly a rare one. The report is interesting in its accuracy and authenticity. It is to be noted that, with one exception, there is no appearance of any constitutional state, hereditary or otherwise, to account for the event."

"In illustration of the rarity of the occurrence, the Vienna Foundling Asylum reports thirteen cases in fifty thousand. Vogel reports only one case in ten thousand children."

Dr. Dudley S. Reynolds said: "I have been much impressed by the reading and discussion of this paper. It opens up a very important question in this connection, and that is the question of development, as well as the question of the classification already suggested in the discussion. One kind of hemorrhage comes on in undeveloped creatures as a result of structural deficiency. This is the class to which belonged the case cited in the paper as having hemorrhages from the buccal mucous membrane, the abrasions wherever occurring on the body; the tumors about the funis from which the blood oozed away, and that general condition characteristic of undeveloped, incomplete structural organization."

"In the case reported by Dr. Donhoff, it is quite certain that that structural deficiency did not exist."

"Hemorrhage may be due to mechanical injury, it may be due to sudden and severe contraction of the abdominal muscles of the child, but those are entirely different things from that hemorrhage which is due to mal-nutrition of the mother."

"A long time ago the hemorrhagic diathesis was an interesting problem to me for study. It was equally interesting with the study of that other great problem of 'taking cold,' or 'diseased or disordered liver,' and kindred mysterious subjects. Thus I arrived at the conclusion that the hemorrhagic diathesis means simply incomplete or imperfect form or structure of the vessels or tissues in which they ramify. It is not proper to ascribe this condition to syphilis unless other evidences of that disease are present. Syphilis is a disease which, whether acquired or inherited, has distinctly marked characteristics in very many of its stages, and it ought to be discerned and is recognized by astute practitioners of medicine by these characteristics."

"As to the cases detailed, these children were most likely the illegitimate offspring of people in

indigent circumstances. So, too, a vast majority of cases will be found to occur among the unfortunate classes of people. From these classes came the mothers who give birth to children who die of umbilical hemorrhage.

"The question then, it appears to me, resolves

itself into this conclusion, viz., umbilical hemorrhage purely local in character, can and ought to be controlled; but when associated with general hemorrhages are fatal by virtue of necessity, on account of imperfect development, and are beyond the reach of medical agents."

EDITORIAL DEPARTMENT.

PERISCOPE.

Lister's Antiseptic Treatment.

In the absence of Sir Joseph Lister, Professor Esmarch (Kiel) opened a discussion on this subject at the late meeting of the International Medical Congress. He began by expressing his regret at the absence of the illustrious master and teacher of them all; and then described the plan of treatment followed in his own hospital practice. The aim was the avoidance of suppuration, and the leaving of the wound undisturbed. This was best done by a permanent dressing, preventing the entrance of germs. The things required were: 1, exact hemostasis; 2, the avoidance of cavities in the interior of the wounds; 3, drainage, artificial ischaemia, the application of numerous catgut ligatures on large and small vessels, and the application of a bandage before the removal of the tourniquet, support of all the deep parts by pressure, turning in of the edges of the skin, and pressure. Drainage-tubes, as preventing healing, were not now used by him, but openings were left for the escape of exudations. Asepsis was minutely studied. The bandages were sterilized by dry heat and corrosive sublimate. The spray was used only before operating, so as to disinfect the air in the room. In one operation, distilled water with salt, of the specific gravity of the blood, was used for irrigation, but at the end corrosive sublimate was employed. Other antiseptics, as iodoform, were occasionally used. For bandages, loose absorbent soft matter was needed. Peat was used in pillows (without macintosh) dipped in carbolic lotion. The parts were rendered immovable by glass splints till healing by the first intention was obtained. This occurred in from 4, 8, 10, or 14 days, to 5 or 6 weeks, after operation.

Dr. Mosetig-Moorhof (Vienna) advocated the iodoform treatment of wounds, and said that he used no other antiseptic. He used cold water during operations. There was no irritation, and asepsis was certain. Iodoform prevented transudation of the white blood-cells. He narrated a case of traumatic septic gangrene extending above the knee, where yet the knee-joint was found aseptic at the *post mortem* examination. Iodoform also diminished pain.

Dr. Schede (Hamburg) said that the principles of antiseptic treatment remained unaltered, though the methods had changed. After his training in Halle, when called to Berlin, he found Lister's method perfect in its results. But in Hamburg he never had perfect success with Listerism; he was now unable quite to exclude accidental

wound-disease from his cases. The hospital was old, and in many respects undesirably arranged and situated. He tried iodoform with good results. He had also tried corrosive sublimate, and, after experience, had got from it brilliant results. Erysipelas at once disappeared; not one case had occurred under the sublimate dressing in his wards; no septicæmia, no pyæmia, no irritation. He used it in the proportion of 1 to 500, and had had no case of poisoning. Sometimes, however, there was tenesmus of the rectum. Children especially tolerated the sublimate well. In the dressings, he tried to keep everything dry.

Dr. Mikuliez (Cracow) did not agree with either Dr. Mosetig-Moorhof or Dr. Schede. In his hospital, which was much worse than Dr. Schede's, he had had no erysipelas with iodoform; but iodoform could not be used alone. Other soluble substances must be used, where its insolubility prevented it from fulfilling the indications. He disinfected with solution of carbolic acid, or of corrosive sublimate, and used no spray; in the vagina he plugged the canal with iodoform gauze; in the rectum he stitched one side and the upper end of the sphincter, and used no drain, even when the peritoneum was opened. Poisoning occurred only from excessive use.

Dr. Neudorfer (Vienna) said the aims of antiseptic surgery were the same, but the methods varied, and must vary, very greatly. Each surgeon was satisfied with his own plan, and really got good results; but statistics were not of much value. Surgeons must study rather in the direction of sepsis. Sepsis required water; therefore he used no water in his treatment of wounds. He used no sponges, but a dry towel crumpled together, to wipe up the blood. The serum of the blood should be studied; oxidation and deoxidation were important processes. He used for wounds peroxide of hydrogen, and had found singularly good results.

Professor Buchanan (Glasgow) said that the discussion of antiseptics without Lister was like the play of *Hamlet* with the Prince of Denmark left out. As a representative of Scotland, the home of antiseptic surgery, a colleague of Lister, and one who had witnessed his earliest results, he wished to contribute a few words to the discussion. He agreed that the principles of antiseptics were the same, though the methods might vary; and he described the method now employed in Glasgow.

Mr. Schelkley (America) said that the tendency to sepsis, etc., was different in different cases. His practice was in the tropics. At first he used thorough Listerism; he never, however, got heal-

ing by the first intention, but always slight sloughing of the surface, and union by the second intention; yet there was no pus nor any pain. He then changed the plan, ceased to use the spray, and irrigated during the operation with salicylic acid or corrosive sublimate, and used iodoform dressing or boracic lint. Salicylic acid and iodoform gave the best results, yet he did not get union by the first intention.

Dr. Koeberle (Strassburg) said that for some time he had used only linen to wipe wounds, and had since had no erysipelas among his operations. He claimed to have had better results than Schede; even his ovariectomies were all cured.

Professor Plum (Copenhagen) said that the Danish surgeons agreed entirely with Germany, but he could not support Esmarch's plan, on account of the cost. The chief antiseptics were soap and brush, and by simple means much might be done.

Dr. Trélat (Paris) said that he had three years ago laid down the following rules: The wound should be made of a form suitable for healing by first intention, and perfectly adapted. No foreign body, either mechanical or septic, should be left in the wound. Antiseptics did not exist in some countries—not on the top of Chimborazo; and half educated Americans did remarkable operations on negroes. The principles of antiseptics were not altered; the practice was being perfected. He used iodoform gauze, chiefly as plugs, and superficially as required. He applied a large cushion, pressed with elastic bandages, to the wound, changing the dressings on the fifteenth day.

Dr. Mosetig-Moorhof challenged Dr. Milkuliez to say that he had ever tried a thorough iodoform dressing; and, if not, how could he know that iodoform required other antiseptics to supplement its use. At the same time, when Dr. Schede tried iodoform, there was an epidemic of erysipelas all over Europe; and if he would try it now, he would get better results.

Professor Plum closed the debate with a compliment to Sir Joseph Lister, which was received with great applause.

Muscular Wasting Co-existent with Joint Disease.

Dr. William M. Ord, in his address in medicine, before the Brit. Med. Ass. at its last meeting, said:

For some years I have been led to observe, in a certain group of cases of chronic rheumatic arthritis, the co-existence with the joint-lesion, always well marked, of affections of muscles. These have been not merely weakness of extensors, and tonic contraction of flexors, the two factors which largely determine the character of the deformities of the disease, but marked and excessive wasting of muscles, closely resembling those of progressive muscular atrophy. Together with these, I have noted the existence of fibrillar tremors, and of electrical reactions like those of progressive muscular atrophy in the general, but with some indications of less loss of galvanic than of Faradic sensibility, with some slight indication of the reaction of degeneration.

In addition to those, I have noticed, as others before me have noticed, a wasting of the tissues other than the muscles of limbs.

These concern, in the hands, loss of substance

in the soft parts of the digits, the wasting of the skin, which brings about a satiny or glossy quality of the surface, and a dwindling of the nails, which we see carried to the full in extreme true gouty affection of the fingers, where the nails become small scaly appendages of the carrot-like digits. In some cases, I have also observed exaggeration of the so-called tendon-reflexes, and in some, fibrillar tremors. In fact, as they present themselves to me, these are cases of progressive dystrophy of joints marching with progressive atrophy of muscles, and with atrophy of the other tissues of limbs. My friend, Dr. Hadden, who has taken great interest in these cases, has recently presented a paper to the Clinical Society of London, taking up some of the points here mentioned. I may here relate two cases which bear upon this relation.

M. K., a married woman, aged 60, was recently under my care. There was no history of gout or rheumatism in her parents, but she had one sister, who was said to suffer from gout. She presented the lesions of rheumatic arthritis in the hands, knees, and ankles, but the hands were most affected. The muscles of both arms were distinctly wasted; the skin of the ends of the fingers was glossy, and the soft tissues around the two last phalanges were much wasted. The right hand was affected more than the left. The tendon reflexes were greatly exaggerated, both at wrist and elbow, particularly on the right side. The hands showed the adduction deformity of chronic rheumatic arthritis, rather than the claw of progressive muscular atrophy. The electrical reaction, of both kinds, was lessened; she had, therefore, slowly progressing in company, arthritis, wasting of muscles, wasting of tissues generally, and wasting of skin, without the reaction of degeneration. I could, in her case, detect no reflex cause. She was anæmic but not thin, and had worked hard. The case certainly pointed to a common central nervous origin of all the dystrophies.

A case now under care is more interesting. The patient, a man, following the occupation of salesman, and not the victim of overwork, has been ill for ten or twelve years. He suffered from rickets in childhood; there is no record of acute rheumatism in his own life, or of any joint-affection in his ancestry. When first ill, he had occasional attacks of weakness in his limbs, accompanied by swelling in the ankles, knees, wrists, and fingers, never in the shoulders or elbows. These attacks came and went, leaving him, at first, well in the intervals, but for some years he had not been possessed of proper muscular power. Two years ago he was violently shaken by a thunderstorm, since which the symptoms of which he now complains have appeared. He has now, typical rheumatoid arthritis of the hands and feet; the right shoulder is stiff and painful on movement, particularly in abduction; there is grating; and a rim can be felt around the articular end of the humerus. The elbow is not involved, but the wrist is greatly distorted, almost to dislocation. There is wasting of the interossei of the hand, of the thumb-muscles, of the muscles of the forearm, and in an excessive degree of the right deltoid; the right biceps being also, but not so profoundly, wasted. There is no paresis, only such loss of motor power as would

correspond to loss of muscular substance. Marked fibrillar twitchings can be seen in the arms, being more active in the right. The feet show chronic arthritis without any notable wasting of muscles. The knees are slightly affected, the hips free. There is no loss of sensation anywhere, and no impairment of the functions of bladder or of the rectum. The deep reflexes are rather diminished, the superficial not affected. The electrical reactions of the muscles chiefly affected are impaired. The right deltoid is much less sensitive to the galvanic current than it should be, and responds only to a Faradic stimulation stronger than that which should normally excite it. The biceps gives the same reactions in a lesser degree. The other muscles have normal reactions. In this case there is no history of gout, of lead-poisoning, or of causes likely to give rise to spinal trouble. These dystrophies of muscle and nerve are not accompanied by dystrophies of skin. The joint-affection was, to all appearance, preceded by a distinct accession of muscular debility.

Cholera Infantum and the Hydrencephaloid Condition.

The hydrencephaloid condition, or spurious hydrocephalus, is liable to develop as a sequel of badly-treated cholera infantum; and in order to call attention to this subject, Dr. John Strahan read a paper before the last meeting of the British Medical Association.

When spurious hydrocephalus is coming on, all fever which existed previously in cholera infantum disappears, and the temperature becomes subnormal. There are irritability and fretfulness, with hoarse cry.

Then comes on the somnolent stage. The surface is cool, the skin pale, the pulse quick and weak, the eyes half closed, sunken, and surrounded by wide dark circles; the fontanelle, if still unclosed, is concave, the head cool. The child ceases to take notice, the pupil is insensitive to light, the head is rolled frequently from side to side, the child gradually becomes more drowsy. If the case be neglected or improperly treated, coma gradually comes on, then convulsions and death.

Regarding the diagnosis of this state, all symptoms of inflammation or congestion are wanting, and the stupor or coma is not accompanied by squinting, inequality of the pupils, labored respiration, irregular pulse, or other symptom of inflammation, except the drowsiness. An important point is to carefully ascertain the history of the case, also whether any sufficient cause for nervous exhaustion and cerebral anemia exists, or has lately existed. In a very doubtful case, the use of the surface-thermometer, to ascertain the temperature of the scalp, is desirable, as in this affection the temperature is rather below normal; but in any affection attended by hyperæmia, the reverse is the case.

The first and most important point is to stop the vomiting, as, while this goes on, the patient cannot be nourished, nor can the diarrhoea be arrested. He has found one-sixth of a minim of creasote and one-half minim of tincture of iodine, in a drachm of camphor-mixture, given every half-hour, or repeated immediately for a few times

if rejected, by far the most effectual prescription for vomiting; often it acts like a charm. At the same time, between the doses, he gives one-twelfth of a grain of calomel, or one-third of a grain of hydrargyrum cum cretâ, rubbed up with a few grains of sugar of milk or magnesia. Often this checks the diarrhoea in a few hours, when, of course, the interval between the doses is prolonged gradually. If the diarrhoea be very frequent, at the rate of forty or fifty discharges in a day, or if a few doses of the mercurial do not seem to produce some impression, he combines the hydrargyrum cum cretâ with ten grains of bismuth, and gives it every two hours. When the violence of the attack is over, one-sixth of a minim of creasote, with ten grains of bismuth, or with lime-water, or with chalk-mixture, is continued, at gradually lengthening intervals, as long as any diarrhoea remains. But, should the case remain unimproved for twelve hours, he gives an enema of a drop or two, according to age, of tincture of opium, in a little starch. This restrains diarrhoea powerfully. In severe cases, he always stops the milk entirely, and feeds on barley-water as thick as good milk, with fifteen to thirty drops of port wine frequently. This strong barley-water much resembles milk in its properties, *minus* the casein. Beef-tea is badly borne in such cases; besides, it is a mere stimulant, and not so effectual as wine. All infants' artificial foods, and other forms of starch, are simply hurtful, as they pass through the alimentary canal changed, indeed, but not in the slightest digested, just as the casein appears as curds in the dejections.

As to the treatment of the hydrencephaloid condition, should it unfortunately set in, the diarrhoea, if still present, must be stopped at once, if possible. But whether diarrhoea be present or not, the child should have a hot poultice, faced with mustard, applied to the nape of the neck, also some very hot application to the cardiac region, on account of the powerfully-stimulant effect of local heat on the heart. He then gives about ten minims of aromatic spirits of ammonia in camphor-mixture every two hours, and, at a different time, a drop or two, according to age, of Ashburton Thompson's tincture of phosphorus in a little mucilage. If the digestion will permit it, good milk for food, not less than a pint and a half, or more than two pints in twenty-four hours, with frequent doses of ten to twenty minims of brandy. Should the digestion not permit of milk, then the raw-meat plan finds its most useful application.

The nurse should be cautioned against raising the child into the upright position; the body-heat must be kept up by some means, or the child will die; plenty of hot flannels and a heated room usually are best, but the ventilation of the room should be very good. By such means, a wonderful improvement is often obvious in one or two days, and frequently recovery is complete at the end of three days. Should the hydrencephaloid condition come on without previous cholera or diarrhoea, as it sometimes does after weaning, from loss of blood, *e. g.*, by leeches, from improper use of cathartics, or, indeed, from exhaustion from any cause, even from improper treatment of the early stages of the complaint itself, the treatment is just the same; and whenever we see the

surface of the fontanelle concave and depressed, we should put thoughts of cerebral congestion and tubercular meningitis out of our heads, and diligently employ every means of tone-giving, stimulation, and support.

Causes of Death.

In the *Edinburgh Med. Jour.*, February, 1884, Dr. John Haddon says:

Having kept the counterfoil of the certificate of death, I am able to look over all the deaths with which I have met during eleven years of general practice in a suburb of a large town in England. The retrospect points out some facts which may be regarded as of general interest.

Altogether the deaths number 175, giving about 16 for each year. There were 94 males and 81 females. The following table of some of the common causes of death shows the number of deaths, and the proportion which the males bore to the females in each case:

Disease.	No. of Deaths.	Males.	Females.	Sex not noted.
Phthisis	17	3	13	1
Pneumonia . . .	17	9	8	0
Meningitis . . .	16	12	3	1
Bronchitis . . .	13	6	7	0
Cardiac	11	5	6	0
Scarlatina . . .	9	3	6	0
Typoid	9	5	4	0
Measles	4	3	1	0
Smallpox	4	0	4	0
Erysipelas . . .	3	1	2	0
Diphtheria . . .	2	2	0	0

The following points seem worthy of note:

1. That diseases of the lungs cause 35 per cent. of the deaths, while all the infectious diseases put together cause only 27 per cent. of the deaths; and yet it is on the subject of the infectious diseases that the health officer and the public are most anxious. It may be that if diseases of the lungs were notified, and their etiology as carefully studied as that of infectious diseases has been, some startling but useful inferences might be arrived at as to the clothing and housing of the people.

2. That for every male that phthisis killed, it killed 4 females.

3. That pneumonia caused 17 deaths:

- 8 one year or under (catarrhal);
- 3 between 30 and 40;
- 3 " 40 and 60;
- 4 " 60 and 92.

From such figures we may infer that catarrhal pneumonia is very fatal to infants.

4. That bronchitis caused 13 deaths, of which 3 occurred below 6 months of age, and the rest between the ages of 54 and 81 years. The conclusion that bronchitis is seldom fatal except in advanced years, seems fully warranted.

5. That meningitis caused 16 deaths, of which no fewer than 12 were males. Unlike phthisis, this disease appears to kill 4 males to every female:

- 6 about or below 1 year;
- 4 between 2 and 3 years;
- 1 at 6, 7, 13, 49, and 58 years.

Thus it would appear that up to the age of 3 years, meningitis is a common cause of death.

6. That cardiac diseases caused 11 deaths, amongst which are included 2 cases of ulcerating endocarditis.

7. That although cases of pleurisy and acute rheumatism were commonly met with in practice, they do not occur among the causes of death, from which we may infer that these diseases are by no means frequently directly fatal.

In conclusion, I am aware that mistakes in diagnosis will occur, and that I have but few cases from which to generalize; nevertheless, knowing the great doubt as to diagnosis which shrouds the registrar-general's returns, I venture to submit this as my contribution to the literature of a subject which will be of importance so long as man is an inhabitant of this earth.

Treatment of Sick Headache.

Dr. Richard G. Jack reports this instructive case in the *Lancet*, August 23, 1884:

Mrs. N., aged 26, married, two children, had all her adult life suffered to some extent at the periods, and also was troubled with what is commonly called "sick-headache." She was treated by various doctors in the Western States of America, and at length she sought the advice of Dr. Thomas, of New York. He came to the conclusion that the only possible relief was to be obtained by removal of the ovaries; that she was then much too broken down for the operation; but after a trip to Europe had set up her health, he would, on her return, operate. I first saw the patient in June, 1883. She was then in the second day of the period, and under one of her headaches. These begin in one side of the head, and the pain gradually increases until the patient loses consciousness, the limbs become rigid, the hands clenched, the eyes half open and turned up, and a shivering fits come on every few minutes. At other times the attack takes the form of spasm of the glottis. Seeing her first in one of her severe attacks, I introduced my hypodermic needle, and injected one-sixth of a grain of morphine. I left the needle in, and in seven seconds relief was obtained; but as it was not complete, at the end of five minutes I gave the same quantity, and withdrew the needle. The pain subsided, and did not return during that period, but the patient suffered from severe sickness, which lasted thirty hours. In a few days I ordered iron and quinine, with shower-baths, good food, and early hours. When the next period was expected, I gave belladonna and bromide of potassium. As soon as the period came on, I kept the patient in bed, applied a blister of the size of half-a-crown over each ovary, and ordered a morphia pessary at night. The period passed over without a sign of pain or trouble. The tonic treatment was resumed, and the patient's health was steadily improved. The next period was anticipated a day or two with the belladonna and bromide, and when the flow began she was kept in bed the first day with half a mustard leaf over each ovary. No pain; period normal. On the next occasion, feeling the restraint irksome, and forgetting the date, the patient went to a theatre on the very

night of the return of the period, and at 1 a. m. I was sent for. I injected one-third of a grain of morphia; the relief was instantaneous, and by increasing the dose to half a grain the sickness diminished. I tried the addition of atropine, but without effect. By persistence in the treatment, essentially the hypodermic, the patient is freed from headache, and no longer looks sick in mind and sick in body, having regained color in her cheeks. I have repeatedly seen the same good effect in ordinary sick-headache, either from hypodermic injection of morphia or from a dose of chlorodyne.

REVIEWS AND BOOK NOTICES.

BOOK NOTICES.

A Text-book of Pathological Anatomy and Pathogenesis. By Ernst Ziegler, Professor at Tübingen. Translated by D. MacAlister, M. D., Part II. New York: Wm. Wood & Co.

A Manual of the Throat and Nose. By Morell Mackenzie, M. D., New York: Wm. Wood & Co.

These two volumes are parts of "Wood's Standard Medical Authors;" the last named is Dr. Mackenzie's well-known work, which we have recently noticed, and which occupies a deservedly high rank among authorities on that branch.

Prof. Ziegler's treatise deserves particular commendation for the absence of superfluous matter in it, the clearness of its arrangement, and its conscientious accuracy of statement. It is illustrated with numerous woodcuts, so essential to a volume of this character. As it is by a practical teacher of the branch, its presentation of the subject is especially adapted for those who wish to master its intricacies for the first time.

Proceedings of the Philadelphia County Medical Society. Vol. VI. Philadelphia: 1884, pp. 416.

This volume, exhibiting the results of something less than a year's work, would be a credit to any society, and is one that Philadelphia physicians have a just right to be proud of. It is not only the amount but the quality of the work to which we refer. Questions both of practical and theoretical interest are discussed, not by a comparison of the opinions of others, but from the results of personal observation.

Of the many topics treated, we may mention the bacillus tuberculosis, the use of hamamelis, the medicinal uses of naphthol, the treatment of psoriasis, nervous prostration, hygiene of the kidney, paroxysmal fever, treatment of syphilis, contagiousness of phthisis—all topics, it will be observed, of immediate importance to the prac-

itioner, and just such as he would like to hear the last word about.

The volume is published by the Society, and may be had by application to the secretary, Dr. M. S. French.

The absence of a table of contents, and a very insufficient index, are blemishes which we hope to see removed from the next volume.

Proceedings of the Nebraska State Medical Society. 16th Session. Pp. 357. Lincoln, 1884.

The larger part of this volume is taken up with the daily proceedings, and the reports of the committees on surgery and obstetrics. The surgical section is especially full, and contains descriptions of several new operations and instruments. The full text of the criticism of Prof. Esmarch on the treatment of President Garfield's wound will be read with interest. Spontaneous dislocation, intussusception, carcinoma, and wounds, are other topics on which there are well-prepared papers. In the obstetric section, puerperal fever and convulsions, placenta prævia and ovariectomy, have papers and illustrative cases. A table of contents would have improved the book.

The Theory and Practice of Medicine. By Frederick T. Roberts, M. D. Fifth edition. 8vo., pp. 1008. Philadelphia, P. Blakiston, Son & Co.

Dr. Roberts' treatise has secured a firm position as a valued addition to our medical literature. That it now appears in its fifth American edition is sufficient proof of that. Its merits are that without being inconveniently bulky, it contains all that is essential; that the author's style is plain and clear, without that affectation of profundity that mars some American books that we could name; and that his therapeutical advice is always safe, though at times it may be too nihilistic to suit all tastes.

The present edition has been carefully revised, and in part rewritten. The chapters on diseases of the nervous system have received especial attention, and the subjects of ophthalmology, electricity, and diseases of the skin, have been revised by specialists in those departments. A number of illustrations add to the value and neat appearance of the volume.

The objection to many of the writers on practice is that they write from some particular point of view. They are rationalists, or physiological therapeutists, or therapeutical nihilists, or seekers after novelties. Of course, this lames their judgment and lessens the worth of their productions. None of these charges can be laid at the door of the present author, and hence we like his book.

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THE CAUSES, PATHOLOGY, AND TREATMENT OF ALBUMINURIA.

As evidencing the narrow limits of our knowledge concerning albuminuria, the discussion which took place at the last meeting of the British Medical Association was striking; and as setting forth just about what we do know on the subject, it was satisfactory. Dr. George Johnson, who is an authority on the subject, tells us that it seems to him that the albuminuria which appears to have resulted from mental and emotional influence is a form of albuminuria from dyspepsia, and the immediate cause of the renal disorder is the excretion of some abnormal products of imperfect digestion. In many of these cases, too, it is obvious that more than one etiological agency has been operative. The man or the woman depressed by mental anxiety, with failing appetite and disturbed sleep, often seeks temporary relief from misery in an alcoholic stimulant; and so it is often found that the noxious influence of alcohol as a substitute for wholesome food has to be taken into account in explaining the albuminuria and the renal degeneration which had their starting-point in mental worry.

This gentleman does not believe that high arterial tension is a cause of albuminuria, and he reasons very logically as follows:

"As the Malpighian capillaries are the source of the albumen in the urine, and as the contraction of the arterioles which gives rise to the arterial tension tends to lessen the pressure on the capillaries in front, we should rather expect to find an inverse relation between the degree of arterial tension and the amount of albumen in the urine; and something like this is actually observed in the advanced stage of the small and granular kidney; where, with very high arterial tension, the amount of albumen is rarely copious, and sometimes scanty, and even for a time entirely absent."

In connection with the discussion on "Physiological Albuminuria," which has been recently occupying the time of the physicians of Great Britain, and more especially of Scotland, this an-

thor considers that the smallest trace of albumen in the urine is always pathological.

By far the most numerous class of cases of albuminuria in apparently healthy persons, is that of individuals who are known to have suffered at some former period from an acute renal disease, with or without dropsical complication. The acute symptoms having passed away, the patient believes and declares himself to be quite well. There is no irritation of the bladder, and no complaint of pain or uneasiness; the urine is normal in appearance, specific gravity, and quantity, but it contains more or less albumen. When cases of this kind are carefully watched, as they should be, it is found that, after a very variable period, the signs and symptoms of incurable degeneration of the kidney are developed.

The longest interval that he has known between an attack of scarlet fever with acute renal dropsy, followed by persistent albuminuria, and at length a fatal degeneration of the kidneys with uræmia, is thirty years. Yet, up to within a few months of his death, the subject of that disease was doing the work of an extensive and laborious general practice.

Until the practice of testing the urine in every trivial ailment for which a patient consults a medical adviser becomes general, many cases of albuminuria in persons apparently healthy will escape detection, until they have passed into the stage of hopeless and incurable degeneration of the kidneys.

Sir Andrew Clark and Dr. W. R. Thomas took part in the discussion of the subject, and it would seem to be the opinion of these three distinguished authorities that albuminuria (persistent) and the presence of tube-casts in the urine can be accepted as evidence of kidney disease. Of course, albumen can be found in the urine when there is no renal disease; for Sir Andrew Clark tells us that in a good many women, for a few days before and a few days after menstruation, the urine, free from blood discs, leucocytes or pus, contains, sometimes continuously, sometimes intermittently, small quantities of albumen. In women guilty of habits of secret personal impurity, a serous

fluid is sometimes secreted into the vagina; and, afterwards, mixing with the urine, is found therein, responding in the usual manner to the tests for serum-albumen. In eczema of the bladder, in the early stages of villous tumor, and in the venous congestions of aged men, albumen transudes into the vesical cavity, mixes with the urine, and may readily be mistaken for albumen of renal origin. In forming an opinion, these possibilities must be taken into consideration, and it must also be remembered that renal and non-renal albuminuria may co-exist. Dr. Thomas believes that alcoholism has more to do with the production of Bright's disease than we give it credit for. He does not mean the taking of alcohol in large quantities, but that constant and regular taking of it, which is such a common custom. We so frequently meet with Bright's disease amongst very steady, hard-working men among all classes, that we are apt to lose sight of the fact. Because no excess has ever been noticed on the part of the patient, we close our eyes to the fact that many such steady-going men drink their two or three glasses of whiskey at night, their two glasses of sherry for luncheon, and two more, perhaps, for dinner. In addition to this, they sometimes take more during the course of the day, especially if they are business men. There are many men who can take their six glasses of something a day for years—yes, for a lifetime—without appearing to suffer in any way, thanks to the healthy organs which have been given to them, and which are day by day working hard to throw this off; but generally the day of reckoning comes sooner or later, often rather late in life. If we see such patients early for other ailments, we find that they complain of a desire to get up in the night to micturate, and alcohol may often be found in the urine. This desire he has always found a valuable premonitory symptom, present when hardly any others were; and whenever he has found it, he has generally examined the urine, and found frequently albumen also; but the appearance of the latter is generally intermittent, dependent, he believes, upon the taking in of a more than usual quantity of

alcohol the day before. These patients complain of frontal headache, confusion of intellect, and feeling of fullness in the head. The sight is impaired. They have a catarrhal condition of the pharynx, larynx, and nose, and are constantly hawking and perhaps coughing. They also have symptoms of dyspepsia, such as flatulence and sickness.

Upon the question of treatment they are agreed, and their recommendations may be summed up in the words of Dr. Johnson about as follows:

"One of the main principles in the treatment of albuminuria is to lessen, as far as possible, the work of the kidneys, and to obtain for them physiological rest. Amongst the most efficient means for obtaining this object, are rest in bed in all acute and severe cases, the promotion of the secretions of the skin and bowels, and, above all, a scanty diet, with entire abstinence from alcoholic stimulants. An exclusive milk-diet is often most successful in the treatment of recent acute cases; the plan being to give half a pint of milk to an adult about every two hours, and to continue this diet until the urine has entirely ceased to be albuminous. It will sometimes be found that, when the albumen has disappeared while milk alone is being taken, a small meal of solid food, fish, or poultry, or mutton, excites a reappearance of albumen. The patient and the friends often look upon milk-diet as allied to starvation, and frequent requests are made for some addition to the dietary. In reply to these complaints and petitions, I am in the habit of quoting the case of a gentleman, a patient of my own, who, in 1873, at the age of fifty-five, being seriously ill with disease of the kidney, the result of too generous living, was placed upon an exclusive milk-diet, which he continued uninterruptedly for a period of nearly five years, never taking even a biscuit or a piece of bread, except when he was traveling, and could not obtain milk. He lived in the country, and kept his own Alderney cows, which gave milk so rich in cream that he found it necessary to have the milk skimmed in order to obviate his tendency to excessive obesity. His usual allowance was a gallon of skim-milk daily. During the fifth year of an exclusive milk-diet he declared that he never felt better in his life; he was cheerful, slept well, and, at the age of sixty, was capable of taking a considerable amount of active exercise. After this, he gradually added to his dietary by taking soup or beef-tea, and the yolk of an egg for breakfast. In 1879, he took

meat once a day. Since then, he has gradually returned to ordinary diet, and takes a glass or two of sherry a day. For six or seven years, he had abstained entirely from alcoholic liquors. I last heard from him in October, 1882, when he reported that, with the exception of some soreness of the tongue and lips, he was in good health. He had learned to test his urine, and found sometimes no albumen—never more than a trace.

"The chief interest of this case is the length of time during which a country gentleman, accustomed to a very generous mode of living, including a liberal allowance of wine, was contented and happy upon an exclusive milk-diet, his health meanwhile having very much improved."

THE INTERNATIONAL COLLECTIVE INVESTIGATION OF DISEASE.

We have already adverted to the Collective Investigation of Disease, which has been in such successful operation in England for some time; and now we are pleased to note that Sir William Gull delivered a most valuable and pointed address before the International Medical Congress, at Copenhagen, in August, in which he strongly advocated the advantages to be derived from a system of international collective investigation. He very truly said that while it will always be the privilege of the highest intelligences to clear the boundaries of knowledge, and to throw the rays of their genius into the surrounding darkness, yet all must be agreed on the great and almost supreme value of the intellectual co-operation of less gifted minds in the simple observation of facts, and especially when the needed facts are scattered over a wide field.

The observations of one man, who has a keen perception, are of course of great value; but how much more valuable would be the observations of thousands, from whose combined experiences certain absolute and definite facts could be deduced—for happily the phenomena which demand our investigation, though complicated and transient, are, it need not be said, the result of unchangeable laws. The capriciousness of Nature, as we speak of it, is but the weakness of our own sense and understanding, and its so-called mystery and obscurity, but the darkness in ourselves.

"We may therefore have this encouragement,"

says Sir William Gull, "that, when any of our work is done, however small and trifling it may seem, it is done and settled for all time, or at least so long as the laws of organization remain what they are; that the clearing of a fact in respect of disease will remain an imperishable inheritance of knowledge to those who follow us, so long as there is disease in the world. We may support our labors, therefore, with a feeling of surety that the problem before us is a settled problem, however difficult its solution. Nature will not delude us, however much we may delude ourselves."

It is only necessary to add that Sir William Gull's suggestion was favorably received by the Congress, and that representatives from each country were appointed, whose duty it shall be to forward this project. We most heartily commend it to our readers, and urge upon them to respond liberally and earnestly to any requests that may be made of them in connection therewith.

NOTES AND COMMENTS.

Massage.

Before the late International Medical Congress, Dr. Zubeindowsky (Berlin) read a paper on this subject. He said that, in stiffness of joints and ankylosis, the restoration of normal function was not always to be obtained. The treatment by massage was generally longer in private than in hospital practice; it was of longer duration in diseases attendant on occupations. It was not advisable to combine massage and bath-treatment. The prescription of ordinary friction (in the baths) along with massage was a source of many inconveniences to the patients. The simultaneous use of massage and electricity afforded no advantage, and the same was the case with cold douches. Massage and lukewarm baths went well together. Orthopædic apparatus had come too much into use, and could often be advantageously and with comfort replaced by massage. In hysterical patients, massage was a hypnotic and cumulative agent, even when applied to limited portions of the body. In the sick as well as in the healthy, massage often at first produced increased tenderness and suggillations, which disappeared with continuance of the treatment. Diseases of the knee

had a greater influence than diseases of other joints on the general condition, both physical and mental; and, on the other hand, mental excitement might give rise to neuroses of the knee-joints. Sympathetic neuroses occurred most frequently in the knee. Exhaustive neuroses arising from mental disturbance, like those connected with occupations, offered a profitable field for massage, as did also inflammatory conditions of joints consequent on disuse and rest. Massage should form an integral part of the after-treatment of traumatic injuries of greater or of less extent. In recent fractures, massage was injurious; in pseudo-arthritis it was very useful. The so-called nerve-pressure of many of the Swedish lay practitioners was to be avoided.

Alcoholism in Childhood and Youth.

Dr. Thomas More Madden somewhat surprised the members of the British Medical Association at their last meeting, by telling them how comparatively common among children of very tender years was the habit of consuming alcohol, and how many cases of juvenile, almost infantile, diseases, the results of alcoholism, he has been called upon to treat. By way of illustration, he related five cases. The first was a well-marked case of delirium tremens in a boy aged eight; the second a boy of the same age, suffering from chronic alcoholism, and so on. Of course, as we might infer, these cases are found amongst the lowest classes of society, where the parents are in the habit of sending their small children to the neighboring public houses for liquor; oftentimes on the way home these little ones will take a "taste" from the pitcher, which sows the seed that germinates into an irresistible desire for alcohol; while in other cases, the parents (through ignorance, no doubt,) will reward the little ones for running the errand with a sip of porter or spirits. Again, it would seem, according to Dr. Madden, that these drunken women transmit a taste for liquor to their offspring. The habit of drinking among women (which is much more prevalent among the higher classes in England than in this country) is often produced by physicians recommending liquor for women suffering from some uterine disease. Therefore, Dr. Madden issues the advice, and those who heard agreed with him, that when a physician desires to give a patient the benefits of the stimulating influence of alcohol, he should prescribe it as a drug in definite doses, and not as liquor to be used at the discretion of the patient. Similar views were enunciated by the Philadelphia County Medical Society last winter.

The Communicability of Phthisis.

Notwithstanding the immense amount that has been written and published concerning the communicability of phthisis since Dr. Koch first announced his discovery of the bacillus, we seem to be no nearer a unanimity of opinion on the subject than we were a year ago. The whole question seems to be about as follows: That for the disease to develop there must exist some constitutional peculiarities, the intricate nature of which we have not yet grasped. Dr. Alfred G. Barrs, who contributes an article to the *Lancet*, August 23, 1884, seems to hit the nail on the head in the following conclusions:

1. The tubercle bacillus is constantly found in all lesions of a tubercular nature, and in all cases of pulmonary phthisis in the human subject.

2. So far as the communicability of tuberculosis in animals is concerned, this is clearly proved by inoculation experiments. Whether it is so without antecedent transmission there is very little evidence to show.

3. The great prevalence of phthisis amongst those of certain occupations, and the comparative rarity with which those presenting caseous changes in the lungs die by means of a general infection, tend to show that certain predisposing causes are necessary for the production of phthisis—some more definite condition than a mere obliquity of construction, such as we mean by constitutional tendency. The bacillus is not in this case the real and primary cause of the disease, but by its constant presence may determine a wide distribution of the lesion and a fatal result.

4. Although the discovery and isolation of Koch's bacillus, and the inoculation experiments upon animals, make the direct infection of individuals with tuberculous matter possible under certain conditions, these conditions are not established by our present mode of life.

5. The clinical evidence of direct infection from man to man is at present of a quite untrustworthy nature. I need scarcely add that the want of proof of direct contagion in no way militates against the view that pulmonary phthisis is an infectious disorder—that is, due to the introduction of an infective particle from without.

Torsion of Large Arteries.

Before the late International Medical Congress, Dr. Oscar Wanscher (Copenhagen) read a communication on the torsion of large arteries near their bifurcation. He had, he said, had no cases of his own, but he had experimented on the com-

mon iliac artery of the dog in six cases, and on the common carotid of the horse in nine. If peripheral torsion were made (as of the common iliac near its origin from the aorta), the retraction of the inner coat, even though limited, was sufficient to prevent hemorrhage. In torsion of an artery nearer the centre of enucleation, as of the common carotid near its bifurcation, the chances were not so good; but, if a short time were allowed to elapse between the interception of the flow of blood and the act of torsion, so as to permit the establishment of the collateral circulation, the retracted portion would be carried some distance by the blood-current. Retraction should be extensive in an artery of the size of the common carotid of the horse. Torsion alone could hardly be considered sufficient in the vicinity of large collateral branches; but, in such cases, retraction deserved to be regarded as an excellent aid. Retraction of the membranes might take place without compromising the inner vitality of the artery or causing extensive coagulation, provided that proper instruments were used, especially one to compress the artery, and push back the inner membranes.

Incision of the Initial Sclerosis in Syphilis.

Apropos of this vexed question, we note that before the late International Medical Congress, Prof. Pick (Prague), in a paper on this subject, said he confined his remarks to hard chancres, and distinguished carefully between those cases in which the glands were indurated and those in which they were not. Where the glands were affected, these also must be excised; but in such cases, almost without exception, whether excision was practiced or not, general symptoms made their appearance. The conditions under which the operation might be performed were only partially known. Simple excision of the sclerosis, where the glands were affected, would never give success; and no excision availed when the deep glands were swollen. The effect on the therapeutics of the condition was, he thought, very slight—most commonly only a delay in the appearance of the general symptoms. The operation had, however, served to show that the indurated sclerosis was not the expression of general syphilis. The lymphatics had recently been found to be much enlarged in these cases, and he believed that the syphilitic poison passed into the organism through these, and not, as Auspitz believed, entirely through the blood.

Dr. Unna (Hamburg) believed that syphilis spread, not by any one path, but by both the

blood-vessels and the lymph-vessels, and by simple contiguity of tissue.

A Peculiar Case of Chronic Nephritis.

The Paris correspondent of the *Brit. Med. Jour.*, August 30, 1884, says that M. Hanot has had recently in his wards at the Tenon Hospital a female patient, suffering from chronic nephritis, who was suddenly attacked by gangrene of the left foot and leg. Her affection was easily diagnosed. All the essential symptoms were manifested—*bruit de galop*, albuminuria, uræmia, etc. She left the hospital in June, but was forced to return in July; and, on the 17th, she felt a violent pain in the gastrocnemius muscle of the left leg, also a sensation of cold along the entire limb and foot. The vessels in the popliteal space were hard and painful. The foot was cold and colorless, afterwards mottled; gangrene immediately appeared, and reached as far as the knee. In about eight or ten days the limb became almost severed from the trunk; there was neither suppuration nor fever. The general condition of the patient was good, and her appetite remained excellent. M. Hanot suggests that arterial lesion, frequent in interstitial nephritis, may be the cause of this gangrene; but hitherto lesion of so important an artery has never been observed.

Treatment of Cystine in the Urine.

Dr. Lionel S. Beale tells us, in the *Lancet*, August 30, 1884, that cystine is one of the most persistent of urinary deposits. After it has once appeared, it may be produced, and in considerable quantity, over a period of twenty years or more, or its production may only cease with life. It is among the least common of urinary deposits, and usually its presence is not associated with any symptoms more serious or definite than malaise, a feeling of weakness, fatigue, or exhaustion, with depressed or very low spirits. The cystine crystals form a visible whitish deposit, which varies much in quantity from day to day; and sometimes forms a sediment. Dr. Beale claims that large doses of carbonate of ammonia will remedy this condition. He had one patient who took as much as fifty-five grains daily for a period of twelve months, with most satisfactory results. The second year he took thirty-five, and the third year about twenty grains per diem.

Neuralgia Treated by Cold.

The Paris correspondent of the *British Medical Journal* says that M. Debove, physician at the Hos-

pital des Tournelles, treats his patients suffering from sciatica by refrigeration. His method hitherto has been attended in some instances by immediate recovery, and in others rapid, though not instantaneously. Chloride of methyl, enclosed in a siphon, produces a temperature of 10° Fahr., sometimes of 59° Fahr. The former is the degree necessary. Cold is applied along the nerve affected, which is not distressing to the patients; one of them declared that ten applications of cold were preferable to one of the actual cautery. When the neuralgia presents limited areas of pain, the jet is directed on them. The siphon with the tube fixed to it amounts to six or seven dollars. The chloride of methyl costs \$1.25. M. Debove used Richardson's apparatus, but failed to obtain any results with it.

A Bottle in the Rectum.

A singular case is reported by Dr. Aug. Dixey in the *Lancet*, August 30, 1884. A man much distressed and evidently in great pain came to him saying he had a "soda-water bottle in his fundament." Upon at once letting down his trousers, which were covered with blood, he noticed blood trickling from the rectum. On introducing a forefinger into the bowel, he could just detect the edge of the mouth of a bottle, and, by inserting the middle finger as well, was able, after some difficulty and employing all the traction his limited hold permitted, to extract, not an ordinary soda-water bottle, but one which is used to contain ginger ale, the length of which was seven inches and a quarter, and the circumference seven inches. His story was that as his bowels had not been opened for more than a week, and as aperients had not acted, some one advised him to open them by means of a bottle, and that in attempting this it had slipped from his grasp, and all his efforts to get it again were unavailing.

Treatment of Cholera.

Dr. Henry Meymott puts in a plea (*Brit. Med. Jour.*, Aug. 30, 1884,) for "crude opium in the treatment of cholera. Let the external applications consist of the continuous supply of friction with hot flannels, wet or dry, to all the available parts afflicted with cramps till relieved, and sinapisms applied to the epigastrium. Then give half a grain of opium in a small hard pill, every hour till the pain subsides, washed down with a teaspoonful of cold water, previously boiled. Abstain from all nostrums and stimulating medications until the irritability of the stomach is overcome, and in the meantime give nothing but cold

water to assuage the thirst, then substitute hot drinks composed of smooth, fresh, water-gruel, flavored with salt. When the violence of the symptoms has fairly subsided, adapt the treatment to the fresh symptoms as they arise, always bearing in mind the "vis medicatrix naturee."

Union of Wounds and Fractures in Old Persons.

It is so unusual for fractures to unite in aged persons, that all such cases are worthy of record. Dr. Edgar Schmidt reports a case in the *British Medical Journal*, Aug. 23, 1884:

The patient, a healthy German lady, aged 78 or 80 years, was in the act of plucking a bunch of grapes, when her foot slipped, and she fell from the first round of a ladder on which she was standing. The fall resulted in fracture of the neck of the left femur. Her limb was encased in a long splint with weights, and, notwithstanding her restlessness and obstinate spirit, she was able to walk with canes in six or seven weeks. No unfavorable symptom arose with the exception of two bed-sores, which, however, yielded kindly to the application of balsam of Peru.

The lady enjoyed moderate good health until one year after her fracture, when she died as a result of gangrene of her right foot.

The Treatment of Slight Burns.

The Carron-oil treatment of burns is so greasy, and therefore so disagreeable, that it is with pleasure that we note from *Memorabilien*, May 14, 1884, that Dr. Cramer treats slight degrees of burns by means of compression. He applies a layer of wadding and over this an elastic bandage, so as to make firm and even pressure over the whole of the injured surface. By this means the subcutaneous capillaries are emptied in a measure of their blood, and inflammation and exudation of serum are prevented. The compression is to be maintained from three to fifteen hours, according to the intensity of the burn, and then a less degree of pressure kept up until new epidermis has formed.

The Use of Crushed Ice and Lard in the Treatment of Burns and Scalds.

In the *Esclapiad* for April, 1884, page 164, the treatment of burns and scalds by crushed ice and lard is warmly advocated by Dr. Benjamin W. Richardson. To put the method into practice, ice is well crushed, or scraped as dry as possible, then fresh lard is admixed until a broken paste is formed. The mass is then put into a thin cam-

bric bag, laid upon the burn or scald, and replaced as required. The pain is rapidly eased, and its return is the call for the repetition of the remedy. This mode of treatment is as scientific as it is simple. It saves at once the fever incident to pain, and it leaves very little contraction of surface.

In-growing Nail.

In a note to the *Union Médicale*, June 22, M. Monod states that during the last twenty years he has treated in-growing nail by a very simple and effectual method, which does not involve the removal of the nail. He makes a free application of nitrate of silver at the commencement of the affection, without isolating the nail. If the cauterization is carried deeply into the diseased furrow, the patient has usually, even by the next day, derived considerable relief, and is able, even thus early, to walk in moderation with an easy shoe. Extirpation of the nail should be reserved for quite exceptional cases.

CORRESPONDENCE.

Is it Always Necessary to Tie the Cord?

EDS. MED. AND SURG. REPORTER :

I ask this question, not because I feel confident of my ability to answer it in a way to settle it beyond hope of dispute, but because the question has been raised in my own mind by observation of the process of parturition in some brutes, and in a couple of cases in the "genus homo."

I know that most authorities unite in advising the ligation of the funis; some advising that the cord be twice ligated, and cut between the ligatures; some that it be "surrounded by one ligature," and cut on the maternal or placental side of ligature, leaving the placental end to bleed, with the end in view of lessening the size of the placenta, and consequently its more easy delivery; while other writers leave it to the discretion of the accoucheur whether he shall tie once or twice, but all seem to unite in advising the tying of the cord.

Now, in the light of the following facts, I feel justified in asking the question, May we not, in many cases, leave the cord without a ligature, and so avoid the risk of a troublesome sore, if not of septicæmia, from the cutting of the fingers with a cord stained and rendered slippery by the blood of a puerperal patient?

I do not open this question without facts to justify my action, but think that the following are enough to raise the question, though they may not prove the absolute correctness of its answer.

I have seen cats, when their kittens are born and the placenta delivered, turn and eat the after-birth and bite off the cord.

In the case of pigs, I have seen young very soon after birth (in a few minutes) start in search of the mammae of the sow, and break the cord in

their struggles for freedom of motion; and I believe it is very rare for a kitten or pig to die, or even suffer from hemorrhage of the cord.

Of other animals, except the human, I cannot speak; but I know that in the undomesticated state the funis cannot be ligated, and in the domestic animals I believe it is very rare for them to receive that attention.

Next. On page 390, vol. xlvii. of MEDICAL AND SURGICAL REPORTER, is a short editorial abstract from the *British Medical Journal*, entitled "Midwifery in the Sandwich Islands." In this abstract I find the following: "The umbilical cord is then cut, and always left very long," no mention being made of ligation.

Again, in the same journal (MED. AND SURG. REP.), page 564, vol. 1., is an abstract from the *Edinburgh Medical Review*, bearing the title, "Parturition in Central Africa," by Mr. R. W. Felkin. In it I find this: "In the Wadi district the cord is cut at about four (4) inches from the child's body with a stone knife as a rule, but sometimes it is bitten. Should it bleed, the woman in charge takes the cord in her mouth and squeezes it between her teeth till all hemorrhage ceases; but it is never tied."

Now, I will relate two cases of my own:

Case 1. On April 4, 1884, at 1 p. m., R. W., a colored man living about five miles below here on the Sans Souci plantation, called at the office, saying that his daughter had given birth to a child and needed attention. I rode down with him, and found the mother comfortable and in bed, while from a bundle of rags on the cabin floor came a sound of lusty crying. I opened the bundle and found a negro child (boy), with the cord and placenta attached. *The cord was pulseless and bloodless*, and the child in as good condition as any I have ever had the fortune to see.

Case 2. Was called July 3d, 2 a. m., to attend Mrs. G. (white, multipara), in labor. I arrived at the house of the patient at 3 o'clock, and found the child with placenta attached, cord bloodless and wound once around the neck, lying between the thighs of the mother, where she said it had been since 2 o'clock, when it was born. The child was all right, and was crying as loudly as newborn children are wont to do.

In both of these cases I am satisfied that the children would have done well enough if the cords had been cut and left without ligation; and had they been *hospital* cases, and in my care, I would have left them for awhile, at least; but as I knew of the keenness with which country people watch a young physician, and the avidity with which they seize upon and circulate any departure from the usual course, I tied the cord in both cases.

Now, from these facts we see, first, that the brutes do not suffer because of the cord being left without ligature; second, that some races of people *habitually* leave the cord untied without ill effects; and finally that in two cases at home the cord was not tied for an hour in one case, and in the other at least one and one-half hours, and as all hemorrhage had ceased and the children were in good condition, it was absolutely unnecessary to tie the cords, although I did tie them to satisfy the notions of other people.

Now, I believe we may *almost invariably* leave the cord unligated. Do not think I would have

you return to the primitive mode of biting the cord, either for the purpose of separating the placenta, or arresting the hemorrhage; but might we not advise a simple instrument, which would both *cut* the cord and compress it? All that would be necessary would be a pair of short-bladed shears made somewhat heavy, and having on the side of the blades a pair of bosses, whose corrugated or checked surfaces should come close enough together to compress, and if necessary to lacerate the end of the cord, and so arrest all hemorrhage very easily.

And now if this needs any apology, it is this: I have known some very sore hands, and one serious, though not fatal, case of septicæmia resulting from cuts with ligatures rendered slippery with blood of puerperal patients, and think that this may suggest a way in which we may avoid the risk in many, if not all cases.

D. A. RICHARDSON, M. D.

Oseola, Ark.

A Peculiar Malformation.

EDS. MED. AND SURG. REPORTER:—

Mrs. E. F., æt. 25, strong and robust, of healthy parentage, the wife of a farmer also in good health, was confined on March 31, 1884, with her second child. The previous child had been well-developed and healthy, but died in infancy of an acute bowel trouble. Both labors were remarkably quick and easy, with no complications. At the time above cited, although I arrived at the house within an hour after the pains commenced, labor, even through the third stage, was completed.

Upon examining the child, the following singular and perhaps unique condition was discovered: In the first place, the child was a complete hermaphrodite, and that to a singular extent and in a peculiar degree. At that part where the sexual organs should have been, there was an utter absence of everything, except smooth skin covering the part; and where the anus should have been, there was a like smooth surface; while at the perineum, in the median line, was an anus-like opening, controlled by a sphincter, through which the acts of defecation and urination were and still are alike performed. Perfect control is exercised over both bowel and bladder. The evacuation of each is effected at certain intervals, and usually simultaneously, and with neither does there seem to be anything like incontinence, or want of perfect control.

The other feature, and the one that first attracted our attention, was the presence of a peculiar, semi-spheroidal, very vascular growth, plastered upon the surface of the abdomen, in the umbilical region. It measured 3x2x1½ inches, and bled at the slightest touch. From the centre of this growth proceeded the umbilical cord, which was of usual length and appearance, and was attached to a perfectly normal placenta. This growth, as was remarked by other physicians who subsequently saw it with me, had the exact appearance and feel of true placental tissue. The condition of things seems to have been: an umbilical cord with a placental development at each end, the one normally attached to the uterus, the other abnormally attached to the child.

The growth was not pedunculated, but was attached by a broad, firm base, 3x2 inches. The cord separated on the sixth day, with but little hemorrhage.

A discussion of the causes of this malformation would be interesting, and no doubt embryology would be equal to the emergency; but remembering to have heard an eminent professor remark that the most absurd thing he knew of was the wild speculations of a country physician, I gladly leave theoretical ramblings to a nimbler wit and a readier pen.

At this date the growth has decreased somewhat in size, is of very spongy texture, and bleeds readily upon pressure or irritation. Over its surface are several small islets of apparently true skin forming, leading to the hope that nature will thus protect that which surgery would as yet deem hazardous to remove.

E. R. BATEMAN, M. D.

Cedarville, N. J.

Treatment of Acute and Chronic Urticaria with Bromide of Ammonium.

EDS. MED. AND SURG. REPORTER :—

Within the last ten days I have treated three cases, two acute and one chronic, of urticaria with bromide of ammonium. The first case was that of a grocer, whose attack came on very suddenly about four o'clock in the evening. I saw him two hours afterwards, and he told me that he was taken a year ago exactly in the same way, with violent hives, and that in two days the attack was followed by facial erysipelas. His face and hands were red and swollen, and covered with hives, and he was rubbing and scratching in the most active manner. I prescribed the following:

R. Bromide of ammonium, $\frac{3}{4}$ ij.
Aqua destil., $\frac{3}{4}$ vj. M.
Sig.—Shake well, and take a tablespoonful every two hours.

I directed him to take in addition ten grains of blue mass at bedtime and a dose of epsom salts in the morning. His urticaria disappeared during the night, and he had no return of it.

The second case was that of a clerk. He had been eating fish for a day or two, when suddenly violent urticaria made its appearance. I prescribed for him:

R. Bromide of ammonium, $\frac{3}{4}$ ij.
Aqua camphor., $\frac{3}{4}$ vj. M.

Shake the vial well, and take a tablespoonful every two hours.

After the second dose his hives began to get better, and the next day they disappeared, without a return of them.

The third case was that of a young lady. She informed me that she had had the hives for three months. That they did not trouble her during the day, but just as soon as she got in bed at night they would come on and torment her dreadfully for two or three hours. I found nothing wrong with her but the hives, and I prescribed:

R. Bromide of ammonium, $\frac{3}{4}$ j.
Aqua destil., $\frac{3}{4}$ vj. M.

Shake the vial well, and take a tablespoonful every three hours.

In four days she returned to thank and inform me that the mixture had cured her hives.

J. B. JOHNSON, M. D.

Washington City, D. C.

Alopecia.

EDS. MED. AND SURG. REPORTER :—

If Dr. George A. Stewart, of Scranton City, Iowa, (see MEDICAL AND SURGICAL REPORTER, August 30, 1884, p. 250,) will turn to page 32, vol. 32, MEDICAL AND SURGICAL REPORTER (1875) he will then find a case similar to his by Dr. Rose, from *Brit. Med. Jour.*, except that Dr. R.'s case experienced "a sudden and severe nervous shock" prior to his hair falling. He succeeded in curing by painting his scalp once a fortnight with blistering fluid and using the following lotion:

Carbonate of ammonia,	One drachm.
Tincture of capsicum,	One drachm.
Rectified spirit,	One ounce.
Glycerine,	One ounce.
Rose water,	Eight ounces.

To be applied freely over the body night and morning.

I think the doctor misnamed the disease (begging his pardon). Alopecia areata is defined to be, "a contagious disease produced by a vegetable parasite which, attacking the hair, leads to the formation of circumscribed, pale, smooth, bald patches;" hence the synonyms—"area," "alopecia circumscripta," etc. See Reynolds' System of Medicine," vol. iii., p. 942.

Dr. Rose's case, before alluded to, is very interesting, and will well repay a perusal. The patient's hair was restored on all parts of his body; but was perfectly white, having been brown before.

B. F. RECORDS, M. D.

Platte City, Mo., September 2, 1884.

NEWS AND MISCELLANY.

Micro-Organisms.

From advance sheets of the Introductory Lecture at the opening of the fall course of the Medical-Chirurgical College, of Philadelphia, by Prof. Hugo Engel, we glean the following interesting points about micro-organisms. The address, in full, will be published in our columns. For a long time investigators were undecided whether micro-organisms, as they are comprehensively termed, belonged to the animal or the vegetable kingdom. It has now been decided that they belong to the latter. The terms *micro-organisms*, *microbes*, and *microzymes*, all mean the same thing. Micro-organisms are divided into two primary divisions: 1, *HYPHOMYCETI*, and 2, *SCHIZOMYCETI*. The first class are the pathogenic factors of external diseases, as favus, aphthæ and thrush; while the second cause the internal diseases. The *schizomyceti* are subdivided into the following classes:

1. *COCCI* or *MICROCOCCI*, which are small round bodies, and embrace the cocci of pneumonia, pigment cocci, and some ferment cocci.

2. *BACILLI*, which have a rod-like shape, whether long or short, such as the bacilli of typhoid fever and tuberculosis.

3. *BACTERIA proper* (the whole class are often called bacteria), such as *bacterium termo*, the common grade ferment.

4. *VIBRIONES* or *VIBRIOS*, those which have a wavy form, as *probably* the comma bacillus of cholera.

5. *SPIRILLI*, in the form of stiff screws, such as many of the micro-organisms causing decomposition.

6. *SPIROCHÆTI*, in the shape of flexible screws and other fantastic forms, such as the micro-organism of relapsing fever.

It has been calculated by Ferdinand Cohn, that if the *bacterium termo* were unimpeded in its propagation, and if one were to multiply into two in the first hour and these into four in the second hour, and these into eight in the third hour, and so on, the result would be 16,000,500 in the first day, and 281,000,000,000 on the second day, and that in five days' time the progeny of this little microscopical body would fill the oceans of the world, so wonderfully numerous and fertile are they. One micrococcus, $\frac{1}{300}$ of a millimetre long and $\frac{1}{1000}$ of a millimetre thick, and of which 1,600,000,000 are required to weigh one grain, would in three days produce 50,000,000 pounds of offspring.

Teberine is a disease of the silk-worm that threatened to destroy the silk industry of France. Pasteur found a bacterium in ova that were apparently healthy; all such ova were destroyed, and the threatened danger was averted.

Dr. Koch, of Berlin, furnishes some strong reasons for believing that the comma bacillus is the cause of cholera. When in Toulon, Dr. Koch made it a practice to carefully examine the discharges from, and the dead bodies of, all patients with typhoid fever, dysentery, and the like. In not one single case did he find the comma bacillus. A French sailor was in the hospital, convalescing from typhoid fever; there were no evidences of the disease remaining, he was only weak. At nine o'clock one morning he received word that he would be discharged at noon. At ten o'clock he was taken sick with cholera, and died before eleven. Within six minutes after death an autopsy was made in the presence of Koch. No morbid lesions were found, but the rice-water contents of the intestines contained innumerable comma-bacilli.

In a village in Egypt, thirty persons were taken sick in rapid succession with cholera; they were the first cases in the village. It was discovered that all of these persons had been engaged the day before in washing the clothing of cholera patients. Koch found that wherever portions of clothing soiled by cholera dejections were moist, the comma-bacillus existed in abundance; but it cannot survive more than twenty-four hours without moisture.

In a village near Calcutta, several hundred persons died from cholera in the space of thirty hours, while in villages still nearer to Calcutta (where the disease was raging) no cases had occurred. It was proven that all the persons who were attacked had used water from the same tank, and it was discovered that the day before the outbreak women had been washing clothing from cholera patients in Calcutta in this tank. And, furthermore, it was discovered that wher-

ever, in the tank, there were accumulations of decomposing wood or organic debris, there also would be found innumerable comma-bacilli. It is said that it was the recital of this remarkable experience that caused the distinguished Professor Virchow to give his sanction to the pathogenic nature of the comma-bacillus.

Dr. Koch has also discovered that the bacteria of putrefaction are inimical to and capable of destroying the comma-bacillus, and in this connection it was noted that whenever the sewers in Toulon were cleaned or disinfected, the cholera became worse, which fact would tend to explain the reported immunity from the disease among the scavengers of Toulon and Naples.

Acids destroy the vitality of the comma-bacillus; hence we have an explanation of the fact observed during the last cholera epidemic in London, and of the recommendation made some years since by Professor Da Costa, that when the prodromic diarrhœa is treated with sulphuric acid cholera does not develop.

It has been also observed that this bacillus cannot pass through a healthy stomach; its vitality is destroyed. It was universally noted in Egypt, Calcutta, and Toulon, that not one single case of cholera occurred in an individual whose stomach had been previously healthy. In every case there had been some slight or severe derangement of the alimentary canal. In this connection, attention is called to the fact that in Europe overloading of the stomach is most common on Sundays, and the largest majority of the fresh cases of cholera would develop on Mondays.

Pasteur's Laboratory.

In the Rue d'Ulm, close to the Pantheon, in Paris, stands Pasteur's laboratory. Rarely the famous experimenter leaves the scene of his great discoveries. He is continually at work, leaving nothing untried that might throw a ray of light upon his researches. Although long past the prime of life, he still possesses the indomitable energy that characterized his youth. In his workshop the scientist keeps cages filled with dogs, rabbits, chickens, and other animals to be used in his experiments. When once an animal has been injected with the fluids containing the minute animal life upon which, as Pasteur claims, all disease depends, it never leaves his watchful eye. Closely he observes every change in its condition, and when the time has arrived to kill the animal, he consoles himself with the thought that science demands the sacrifice. The whole basement of the laboratory is transformed into a miniature menagerie. The rabid dogs are Pasteur's favorites. He has provided neat little iron cages for less enraged pets, and often sits before them for hours watching the mad antics of the animals, who snap and snarl at him continually. Pandemonium reigns supreme in this section of the laboratory, but Pasteur seems totally oblivious to the noise which, to the casual visitor, is so distressing. Some are in the first stages of the disease; they tear about their limited quarters, biting at the iron bars and chewing up the hay intended for their beds. The ones only recently inoculated are still affectionate, and retain their moist eyes so full of tenderness. They recognize

their master, and come forward at his call as if to be petted.

The chickens, large and small, crane their necks and keep up a ceaseless crowing.

The pink-eyed rabbits are the quiet members of Pasteur's large family. They chew away at the cabbage leaves with which they are fed, and quietly await their turn to become martyrs of science, while the cute guinea-pigs huddle together, ever watchful for the approach of an enemy.

All of them are destined to be inoculated some time or other, and there is no hope of any of them surviving the experiments of the great Frenchman. Every morning Pasteur pays a visit to the hospital and sees that his sick pets are well cared for. Those which have died during the night are removed to the floor above, and laid upon the dissecting table ready for Pasteur's knife. This is not the only material upon which Pasteur works. From all parts of France he receives coops full of chickens that have died from cholera and other diseases.

In the corner of the large room there are huge baskets filled with straw. One contains a pig supposed to have died from erysipelas, another is filled with the internal organs of a pleuro-pneumonic cow, while scores of them, carefully labeled, are sent by naturalists who, unable to prove their own observations, seek his advice.

It is not only animals upon which Pasteur experiments. Ever since he visited Pavillac three years ago, to investigate the causes of yellow fever, he is never without samples of *vomito negro* (black vomit), which is sent to him in hermetically sealed bottles from the infected ports. Pasteur never throws anything away. The contents of the bottles are carefully desiccated, and the residue is placed in the propagating room. Here there are shelves and tables for the reception of glass jars, in which he keeps the culture-liquids.

By careful manipulation, the dry residue is re-dissolved, and the microscopic animal life allowed to go on increasing. This is Pasteur's favorite working-place, surrounded by his assistants, Chamberland, Roux, Joubert. The death of Thuillier, his favorite co-worker, who died in Egypt while investigating the origin of cholera, robbed Pasteur of a valuable aid. Thuillier was the first to discover the presence of microbes in the tissues of animals, that of erysipelas, and that led Pasteur to continue the investigation and prove that the microbe depended upon the disease. He began to inoculate animals with fluids containing the microbe, and by this means was enabled to reduce the mortality in the rinderpest, which in former years played sad havoc with the cattle in the southern part of France.

At present Pasteur is devoting his energy towards solving the problem of hydrophobia. The results of recent experiments have led him to believe that by means of inoculation it can be successfully cured. He has already inoculated large baboons, and has reason to feel satisfied that he is on the right track. He has demonstrated that by transmitting the virus from the lower orders of animals to the higher it loses strength, until finally only trifling disturbances are caused by its injection. He is confident that at no long distant day he will be able to inoculate human be-

ings. The perfection of this theory he considers the greatest work of his life. Conversing with a friend recently, he said that he was not ready to die until he had proved that hydrophobia is but a minor ill to which the human family is liable.—*Paris Cor. Vienna News Freie Presse.*

The Temperance of the Danes.

It has been a matter of frequent remark that in countries where wine is freely consumed by all classes, to the lesser use of the stronger alcoholic drinks, there is comparatively little intemperance. This view gains additional confirmation from the remarks of the correspondent of the *Medical Press* at the late International Medical Congress, who says:

"I was very much struck here by the great temperance of the people. Wine is taken. At Kronsborg 'there was water, water everywhere, but not a drop to drink.' The tables were lined with wines, clarets, hocks, and champagnes, but there was not a single water carafe. Though this was the case, and though only wine was to be obtained to quench the thirst, yet I did not see a single person out of the 2,000 in the slightest degree with signs of elevation. I watched the people at Tivoli. There was the same moderation; wine was taken, intoxication was absent. On this occasion it might have been expected that the bounds of sobriety would have been passed."

Jefferson Medical College.

The preliminary term or course of lectures at the Jefferson Medical College has recently opened, and is being attended by a very large class of students, the majority of whom are from the Western and Southern States. The lecturers and the subjects taken up in the lectures of this term are: Prof. Da Costa, on Medicine; Prof. Pancoast, on Surgical Anatomy; Prof. Bartholow, on Hygiene; Prof. Chapman, on the Modes of Conducting Physiological Investigations; Prof. Gross, on Genito-Urinary Diseases; Prof. Parvin, on Diseases of Women; Prof. Brinton, on Operative Surgery; Dr. Mears, on Gynecology; Dr. Forbes, on Anatomy; Dr. Atkinson, on Diseases of Children. There are daily clinics at the Jefferson College Hospital from 1 o'clock p. m., and on Wednesday and Saturday mornings at other public hospitals, especially the Pennsylvania and Philadelphia Hospitals.

A Missionary Physician.

Dr. Sarah L. Weintraub, who sailed last May for Beyrout, Syria, went out as a medical missionary to Damascus, where her work is to be entirely among the Arabic women, who are so badly in want of proper medical treatment, owing to the peculiar customs of the country. Dr. Weintraub was born on Mount Zion, one of the four hills of Jerusalem, on the 1st of May, 1861, and still speaks the Arabic language, and has some knowledge of German and French. She has a thorough English education. In October, 1880, she entered the Women's Medical College of this city, and after a three years' course graduated, and immediately entered the Women's Hospital, where she had a year of valuable experience.

Electric Insects.

General Davis, of the British army, who was a famous insect collector, once picked up a wheel-bug in the West India Island, and received a blow that paralyzed his arm for some time. As he shook the insect off he noticed, where it had stood on his hand six red marks, the impression of its feet. Kirby and Spence also refer to this peculiarity of the insect, and other naturalists have received shocks from certain of the luminous beetles. Captain Blakeney took up an unknown caterpillar, and immediately received such a shock that his entire right side became paralyzed, and for a long time he was dangerously ill.

Why Negroes are Black.

Surgeon-Major N. Alcock has contributed to *Nature* an interesting communication as to why tropical man is black, in which he suggests that as in the lowest animals pigment-cells placed behind a transparent nerve termination exalt its vibration to the highest pitch, the reverse takes place when, as in the negro, the pigment-cells are placed in front of the nerve terminations, and that the black pigment in the skin serves to lessen the intensity of the nerve vibrations that would be caused in a naked human body by exposure to a tropical sun; that in fact, the pigment plays the same part as a piece of smoked glass held between the sun and the eye.

The Water We Drink.

It is a sad commentary on the water we drink, when we read that the mortality in the trout exhibit from the Eastern Station of the Pennsylvania State Fish Commission, which came near depopulating the two tanks in which they were placed at the Pennsylvania State Agricultural Fair, is attributed mainly to the impurities in the Schuylkill water.

Items.

—Chicago is to have a new hospital for women and children.

—In the *Lancet*, August 23, 1884, Dr. A. Withers Green reports two cases of rupture of the heart.

—Two cases of rupture of the uterus from the injudicious use of ergot in labor have been reported to the Medico-Chirurgical Society of St. Louis.

—In the *Lancet*, August 23, 1884, Dr. C. D'A. Collins reports a case of sacculated aneurism of the descending thoracic aorta, opening into the left bronchus.

—The death of a centenarian is announced from Bologna, in the Haute Marne, Mdme. Lux, at the age of 104. The old lady was engaged to the last in her household duties.

—Drs. A. Jacobi and N. S. Davis were appointed at Copenhagen as the American representatives on the International Collective Investigation of Disease Committee.

—Dr. Edward Drummond, of Rome, states in the *British Medical Journal*, August 30, 1884, that arsenic has been found conclusively to exert a prophylactic power in malaria.

—A poultice of black walnut leaves, applied to the throat, and the use of a decoction of the leaves as a gargle, have been found by Dr. Curtis, of Illinois, of decided benefit in diphtheria.

—Dr. Mallet, until now Professor of Chemistry in the University of Virginia, has been elected to succeed the late Professor Rogers in the chair of chemistry in Jefferson Medical College of this city.

—Dr. John Thad. Johnson, one of the most prominent surgeons of Atlanta, has resigned the Professorship of Surgery in the Southern Medical College of Atlanta, and will probably remove to California.

—An American exhibition of American products and resources is definitely arranged to take place in London in 1886. We have no doubt the instrumental and pharmacological departments will do their part.

—The *Canadian Practitioner* has a new editorial staff. Drs. Cameron and Nevitt have resigned, and Drs. J. E. Graham and R. H. B. Aikins have taken their places. Dr. Wright continues upon the staff.

—Dr. J. McF. Gaston, of Atlanta, is making some interesting experiments on dogs, looking to establishing a communication between the gall-bladder and the upper intestines in cases of obstruction to the bile-duct.

—A congress of Polish doctors and natural philosophers took place at Posen, ending on June 4. There were three hundred present, some having come from Egypt, India, and other distant parts for the purpose. The next congress will be held at Warsaw or Lemberg.

—A boy who was recently bathing in the river Medlock, in Manchester, England, got out of his depth and swallowed some of the water, which was particularly filthy. Though immediately rescued by another lad, he expired shortly afterwards, death, it is stated, resulting not from drowning but from poisoning.

—To stimulate fraternity, the *Philadelphia Medical World* suggests that the Northern delegates to the next meeting of the American Medical Association rendezvous at Louisville or St. Louis and charter a steamer for the trip both ways, and that the passengers use the steamer as a hotel while at New Orleans. While for some this mode of travel would consume too much time, those who can adopt this plan can be assured of an enjoyable trip.

—An exhibition of infants is to be held in Paris on the 30th of October next, and during as many days after as may be necessary. The infants are to be divided into four classes: 1st, from 1 year to 18 months old; 2d, from 18 months to 2 years; 3d, from 2 years to 30 months; 4th, from 30 months to 3 years. The jury will be composed of medical men and artists. The children who win the prizes will not be those of the fattest, but those of the best physical conformation as regards development of bone and muscle. There have been already upwards of 2,000 applications.

DEATH.

VANDERBECK —September 17, Minnie A. F., wife of C. C. Vanderbeck, M. D., of Philadelphia.